lowan Sorgha	OR CH	OLUM.	BAJR.	or Consetum (	UMBU. typhoi-
Present return.	Next preceding return.	Corresponding return, of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R.A.P.	R. A.P	R. A. P.	R.A.P.	R.A.P.	R.A.P.
***	24	02 2 6		3 7 4	3 3 6
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OF 40 SEERS.

MAI (Elei	RUA OR	RAGI.	ITAL	NI OR K. IAN MIL arla ita	LET
Present return.	Next preceding return	Corresponding return of last year.	Present return.	Next proceding return,	Corresponding return
R. s.:	P. R. A.P.	R. A. P.	R. A. P	R. A.P.	R. A.
	-		4 0	4 2 3	2 4
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	-	1 9 0	2 0	2 3 0	1 15
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					***

the undermentioned Marts of Bengal on the 30th September, 1890.

COCCE	Cuttnok.	20	8 12	0	0	-	0	0	44	0	00	0	0	00	0	0	00	C	0	10	. 15	0	0	10	0 0	10		1		2018	1					0	=	ш	2 10 U	2 H	0	2 10	772
	TO SHOW SEE	100						1			de	-	/ INE	1		784	. :					2.5		117501									ACC.	1	NO. SA					. 1	7 13 2	1	
AMANAN OR WILL.    Interpretation   Present return	T. 150115						100000				4		- 141 101	*	. 0	0	4	0	TOTAL		*	Sec. 16.	1	75.5						1	4			-								10	10
Allegar.    Next preceding return.   Caddan Prace					9		F-71-75-75			41.0					0	0	0	0	0	122	-	0		51 54 55 FM				100 200		0	-	60	0	15								0	80
INDIAN-CORN OR MAIZE   Present return.   Canalar on Pullur.   Canalar	Chittagong.	0								0				C1					TOP	-1		35	1	100	Miss		-		1.	SALE OF	1			1.	ZOLY			-	- 2				
CADJAN PEA.  R R R R R R R R R R R R R R R R R R R	Naraingung	515		0						-			0				00	0		1		0													3		910	1				00	0.0
Present return.   Cadyan Present return.   C	Dacca.										11.25					0	CH	0	0	150		0											- 1	1	1	0	0					0	
Present return.  Can Mays.)  Results of last year.  Corresponding return of last year.  Present return.  Results of last year.	Serajgunge.	0											NAME OF THE OWNER, OWNE			200	1	18		1		11	1	175					- 24		•			1	The same	0	4				14.7	00	86
Present return.  R. Next preceding return of last year.  R. Next preceding return.  R. Next preceding return.  R. Next preceding return.  R. Corresponding return of last year.  R. Present return.  R. Present return.  R. Next preceding return.  R. Next preceding return.  R. Corresponding return.  R. Corresponding return.  R. Corresponding return.  R. Corresponding return.  R. Next preceding return.  R. Next preceding return.  R. Corresponding return.  R. Next preceding return.  R. Corresponding return.  R. Corresponding return.  R. Next preceding return.  R. Next preceding return.  R. Next preceding return.	Caloutta.						100		1 2 -							. 60	Dt.	0	9	0	to	6					7.5	3 601	10		4		-	130	-	co	0	10			-	-	1/5
Present return.  Corresponding return of last year.  Present return.  Corresponding return of last year.  Present return.  Corresponding return of last year.  Present return.  Present return.  Present return.  Present return.  Next preceding return of last year.  Present return.  Corresponding return of last year.  Present return.  Corresponding return of last year.  Corresponding return of last year.		1.5	100			- 1				-		THE R. P. LEWIS CO., LANSING, MICH.	1000	1.760		-	A. 7	70	A	177	R	A	*			C 37983		100		-	200546	70	**		Ħ	75		70				A P	po -
INDIAN-CORN OR MAIZE. ARBAR OR THUR, (Zea Mays.) (Cajanus indicus.)  Finewood,	MARIS.	of last year,	Corresponding return		treas proceding roturn.	Next preceding return		A A COOLIG POURTIL	Present votum	To be desired to the second	of last year.	Corresponding return	-	reat preceding return.	Navt proceding		Fresent return.	December 1		of last year.	Corresponding rature		Next preceding return.			Present return.	S I ALEXANDER OF THE	of last year.	Corresponding return		Next preceding return.			Present return.			of last year.	C		Next preceding return.		Present return.	Decrease antries
					5	8		100					D.	WOO	TRE	. 15			2.25.1		UR.	PE	JAN BOI	AD,	An (Ca			P.	TAT	14. )	Maj	ea COR	CAN.	IGN	-	- 100	- GA	WW.D	R S	AN	MO H	ADA	27, 22

Published for general information.

Offy. Secy, to the Govt. of Bengal.

# Meteorological Report of the Province of Ben

		1 5 6 6 5	N C	P TOIL		20101)	- 1500	de la la	8	TATI	ON OB	SERV.	TIO	140.	181118		195
			AIR	PRESSU	RH.	WIN	D.			T. A.	1/318	TEM	PERA	TURE.	F	1	
Distric	7.	Representative station.	Mean barometric height, S A.M.	Mean reduced to sea-level.	Variation from mean.	'revalling direc-	Mean wind ve- locity.	Highest during week.	Dete	Topico.	Lowest during week.	Date		Mean maximum temperature.	Mean minimum temperature of week.	Mean daily tem- perature of weak.	Variation from
4.1	5	Pooree Gopalpore	29*833 29*822	29°845 29°844	+ '036	NW	271 271	89°7 89°2	3rd 3rd	Oet.	76'6 76'8	29th 29th	Sep.	87'9 87'5	78·7 78·7	83.8	
Pooree		False Point	29'824	29'846	+ '007	sw	240	87:9	3rd		74'6	28th		85.8	76:7	81 3	
Cuttack		Cuttack	29.747	29 849	+.016	ssw	51	93.4	ard	,,	76'3	291p	110	89'8	77:3	83.3	
Balasore		Balasore	29.787	29 846	+ 008	Calm	106	8914	ard		73.8	27th	**	85'8	76.9	81'4	13
South-West Mid South 24-Pergui	inapore}	Saugor Island	29-822	29 848	+1008	se, wsw	843	88*7	1st		77'0	29th		87 0	78 6	82.8	
Midnapore		Midnapore	29 686	29.839	011	8	226	93.3	3rd		73.1	27th		87.6	76:0	81 8	
24-Pergunnaha Howrah Hooghly	= =}	Calcutta	29.833	29.855	+ '016	sw	72	88.6	3rd		71-7	27th	**	85.6	74.7	80.2	100
Burdwan		Burdwan	29.761	29.863	+ '018	8	94	91.6	3rd		74.9	27th	**	86'6	77 1	81.19	32
Bankoora		Bankoora	29.213	29.817	- 011	Variable	100	91.6	3rd		73'1	27th	**	85:1	75.7	80*4	200
Beerbhoom	}	Raneegunge*	29.518	29.855	+.050	SSE	56	91.2	3rd		72'9	27th	.,	86.3	75.9	81.1	
West Burdwan		Berhampore	20*789	25*857	+ 010	s	97	89*1	3rd		72.3	29th		84'4	75'4	79'9	
Moorshedabad		Krishnagher	29.802	29.851	+1019	wsw	127	90'8	3rd		72.8	27th		86.6	76'3	80.5	
Nudden		- 14					1			1							
Khooina Khooina		Jessore	29.828	29 802	+'015	Calm	115	90.7	243	**	75:4	27th	**	87-9	78.0	92.0	
Chittagong		Chittagong	29*806	29.897	+ '021	Variable	61	90'7	3rd		74.7	27th		88.0	78 61	83 3	1
Chittagong Hill	Trao	Demagiri .		au nucció	- Charlenge		6 -	bserv	ations		oeived.		1		20170		3
Backergunge		Barrisal	29.858	29*870	+ '029	SE	83	91.3	3rd	Oct.	78.9	27th		87.7	77.5	82'6	13
Noakholly		Noakholly	29.822	Zir*890	+ '045	Variable	130	88:0	2 & 1	3	73.8	27th		86*1	76.9	81.0	35
Furreedpore	111 12	Furreedpore	29 84	19:883	+ '033	caste ly.	113-	88.5	3rd	**	75.9	27 & 9	9	86.1	77.5	81 8	1
Daces	A41 17.	Овесь	29 846	29'869	+ '019	SE	152	91'1	3rd	**	74'2	27th	**	88'7	77'3	63.0	
Commillah	484 151	Commiliab	29'854	29.800	+ '037	Southerly	76	89.4	3rd		73.8		Oct.	87 6	74'8	81.2	
Mymensingh	*** .**	Mymensongh	29.819	29'844	-'022	1 12 19	112	89.2	3rd		71.1	27th	Sep.	84.3	78 7	79 6	0
Bogra		Bogra	29.815	29.862	+ 014	Calm North-	93	89.3	Srd	**	71.6	28th	***	83*8	73'9	75'9	1
Pubna		Rampore Beau-	29 780	29.851	+ 020	ensterly. Variable	85	90.1	3rd 3rd	"	73.6	29th 27th		85.9	75'2	80.6	90
Rajshahye		leah.	29.773	29'855	+'981	8E	114	90.2	ard		70.2	27th	"	841	76.2	79*4	
Maldab		Dinagepor.*	29.745	29.867	+.001	The state of	73	90.6	3rd		67.6	28, 29		84'5	74'2	77.5	
Rungpore		Rungpore	29*761	29.888	+ 050	11773	116	89 3	3rd		66.7	28th		83.1	7215	77 3	
Julpigoree	}		and the second	TOWNS TO SECOND			21			100			*	1	71.6		
Cooch Behar		Julpigoree	1. *594	29.888	+ 031	116	2117	88.9	2nd	**	65 6	28th	**	82.8	71.0	76:9	1
Darjeeling Hill	Tracts	Darjeeling	23.013	-	-*022	ENE	122	64:6	and	**	46.2	2sth		29.8	49.6	54'8	18
Purneah North Bhagulp	ore}	Purnesh	au 728	201857	+.013	ENE	123	89:2	3.4	**	66.9	28th	.,	82 5	71.8	77 2	1
Mozufferpore		Mozufferpore	29*86)	20'845	Salar I	Variable	189	89'8	Srd	,,	6812	28th		81'4	72'9	77'2	1
Durbhunga	***	Durbhungs	39*695	29.865	+116	Easterly	165	80.0	3rd	**	66.2	2sth		82.2	72'4	773	10
Chumparun		Motimari .	20.642	20'876	+ +46	www	149	01.5	3rd	.,	67'8	28th		82.8	72'0	77:4	1
srun	***	Chupra	29.641	zu 835	+,010	E	109	92.8	lst		69 2	28th		84'4	7414	75/4	
	- (	tehree	29.479	29'540	+'0/2	Variable	179*	89.3	3rd		67.5	28:h		81.2	72'1	76 8	1
shahabad	- 1	Buxsr	9760s	2º-851 29'837	+ 10 lo	N, ely	179	89'4 89'9	3rd 3rd		67.3	27th		81 0	72'1	76'0	18
Gyn		ууь	.9'468	29'848	+'014	1 1	120	90'4	ard	"	65'8	-8th		91,0	78'6	77'1	135
Patna		Bankipore	st 667	29'855	+ 016	THE HELDER	193	89'4	3rd	*	68.3	28, 29 2-th		81.9	74.2	78'.	100
south Bhagulp		Shagulpore	ap-668	zu 8:2	+*005		108	90*7	3rd		68.5	O. B.		814	73'3	77:4	
souths! Pergun	)	- Hillowerk	in many						1000		100	27th	**	53.0	72.7	77.9	10
Hazaribagh		DOOMER .	29:342	29'845	+1010	THE RESERVE	123	50.6	3rd		71:3	29th	,,	84.1	74.5	79'3	
i,ohardugga Manbhoom		Rancher	27.814	29:845	000 010	Caim	169	85'4	3rd 3rd		64.8	28th		78.8	68'8	73.1	10000
Sjngbhoom		інунгланы	9.059	29:830	+*008	Variable	21*	90'4	3rd		72.7	28, 29		85.2	78.8	79.7	100
		Sibsugar	20'187	29.928	+ '034	sw		90'1	and		70.0	& lat	Oct. Sep.	86.7	78.0	79.8	183
Assam .		Dhuba	29.777	29.897	+ '027	NE	203	87.2	2nd	*	69'8	27, 20		80.8	72.5	1000	100
	1	Silchar	29.795	29.902	+'028	Calm	20	93.2	27th	Sep.	110 0	-1, 40		8.00	12.6	1000	

\* Mean of six days.

Explanation.—Summary.—The normal means of air pressure and temperature are the article average or means of the reading curing the same period for the The humidity of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10. The number of the reinfall in that district determined from the returns sent in by the sub-divisional station for the period in question during the stations in the district sending in returns divided by the number of stations. A rainy day is one on which at least hundredth of an inch feil.

the week ending Friday, the 3rd of October 1890.

		U many s	11		1-4-7		DISTR	ICT OB	SERVATIO	NS.				
1	K.	1						RATE	FPALL.					
	nd amount or week,	week	OF	WHHE.	Since	1st of Septe	mber.	Sinc	e 15th May	1890.	number r days.	number days.	Representative station.	District.
	Average cloud at 8 A.M. for	Rainfall of week observing station.	Mean for district.	Normal mean.	Mean for district,	Normal mesn.	Variation.	Mean for district.	Normal mean,	Variation,	Average number of rainy days.	Normal number of rainy days.		
1	4·9 2·7	0'87 0'17	1'54	1.69	16.04	10.97	+5:07	53.77	44'92	+8'85	2.3	2.2	Pooree} Gopalpore}	Pooree
	5.7	0.13	1:36	1'45	16'81	9.93	+6.68	54'08	41'61	+9'44	2.0	2:5	Cuttack	Cuttack
	3.9	1.68	2.61	2.02	18'81	11.70	+7'11	51'54	47'10	+4'44	8'5	2'4	Balasore	Balasore
	5.9	1.54	2.54	1.85	13.28	12.09	+1'19	47.23	63'87	-6'64	3.3	2.3	Saugor Island {	South West Midnapore
	3.1	1.55	3.33	1'11	10.00	8:57	+1.43	44.74	46 71	-1'97	4.3	2.1	Midnapore	South 24-Pergunnahs Midnapore
100	6.0	8.95	5.77	1.18	9.58	8.99	+0.20	46'86	46.96	-0.10	3.8	2:3	Calcutta {	24-Pergunnaha Howrah Hooghly
1	7:0	3.02	4'14	1'05	12.38	- 8 08	+4*30	56'56	42:25	+14'31	4'8	2.0	Burdwan	Bardwan
	6:3	2.78	2.72	1'22	9'17	8.73	+0.45	46 89	48 30	-1'50	4.0	2.5	Bankoora	Bankoora
	6.3	1:77	4'40	1.18	10.39	10.12	+0.17	55'61	4**31	+7'30	4'3	5.0	Raneeguuse {	Beerbhoom
	7:4	5'52	5.31	1'8:	10'09	10.88	-0.77	53'01	45'85	+7:14	4'8	2.3	Berhampore .	Moorshedsbad
Ì	6.6	5'28	4.95	1.26	10.00	9.00	+1'00	46 25	44 58	+1.67	3'4	2.1	Krishnaghur	Nuddea
	67	1.47	1.67	1723	5*46	9.12	-3 93	45 75	48'24	-2.49	2.4	22	Jessore {	Jessore Khoolna
ò	8'1	Nil	0.29	1.88	11'41	15.05	-8'04	113'82	104.26	+9'26	1'5	2.8	Chittagons	Chittagong
	2-18			2.28		13'62	5.		71.75			8.0	Demagiri	Chittagong Hill Fract
	1.3	0.21	0.58	2.11	6.95	14.80	-5 s5	61 14 89'07	69 51	-8'87 -8 74	1.5	. 29	Barrisal	Backergunge
	0.3	1.41	0.95	1.20	4'61	95.7	-6.75	38.41	97 81. 50°35	-1211	2.0	3.6	Noakholly	Noakholly
	41	0.58	0.47	1'51	8.66	10.75	-7.09	52'82	54'88	-2106	1.8	2.3	Furreedpore	Purreedpore
	219	0'27	0153	1.96	5.61	12.02	-6'44	54.03	62.52	-8'43	1'8	2.6	Commilian	Tippoenh
	51	2'99	4:04	2.35	9.99	13 66	-4'00	66 73	65-32	+3'41	8.0	2.5	Mymensingi	Mymensingh
	4'6	13'64	13:39	1.79	21'05	10.74	+10 31	67'30	52'53	+1471	3:5	21	Bogra	Bogra
	54	9'54	6.23	1.49	12:40	10.88	+1.25	48'79	48'-49	+0.40	8.5	20	Serajgunge .	Pubna
	2.6	6'41	9.97	1.53	15'18	12 24	+2'94	64.93	49'27	+15.00	818	4.9	Rampore Beautenl	Rajshabye
	4'0	9.76	8.71	1.10	12'96	11'67	+1'49	56.54	55'18	++41	3.5	2.0	Maidan	Maldah
	2.5	10:50	10.88	1 40	15'41	12'02	+3'39	68'30	63 28	+15'02	2'4	2'2	Dinagepore	Dinagepore
	3.9	15'44	17:83	217	27'57	14.31	+13'36	89.58	69.26	+ 10'02	3.8	2.1	Rungpore	Rungpore
	2.6	5186	6:58	2'33	25'48	19 05	+3'32	140'27	104-92	+35'34	4'4	2.7	Juipigoree {	Julpigoree Uooch Behar Darjeeling Hill Trast
	0.183	9.06	6:38	2.41			+1'20	74'46		PR 2014	4'8	5.9	Darjeeting	Purnesh
	4'7	7°27	6.47	1'65	7:20	12°97	-2.19	50'80	39'54	+10.09	3.0	1:4	Purnean {	North Bingulpore
i Fil	4.0	4:40	4.56	1:57	7:21	y du	-2:39	55'77	41 25	+.4'51	3.0	1.9	0	Durbhunga
	3.7	5'16	3.80	2'41	9:28	10.03	-0.75	62'94	48:61	+19'31	3.5	1'8	Motihari	Chumparun
100	4.8	4:40	2.20	2.16	8'48	8.91	-0.63	52'12	38'83	+13.27	2'3	18	Onapra	Sarua
	6.8	2°88 3'60	3:44	0.00	7.63	7.62	+0'11	48.13	36 18	+13':5	3.6	1'4	Deares)	Shahabad
	41	4.55											Arrah	
	7'0 5'7	5.25	3:39	0.87	4:86	7:05	-2'19	56.71	87 119	+18:72	. 3'5	1.4	Gya	Gya
	dicha	2.87	3.75	1.18	7'59	7.32	+0.57	46'78	37'45	+9.33	5.2	1'5	Bankipore	South Shagaipore
	5'4	4:60	3.02	0.08	6.53	8.33	3,00	50'17	30 57	+10.80	4/0	1.3	Busguipore	Mongbyr
	4'9	2.08	3:52	1.12	7:35	10.68	-3:33	33.39	44180	+9.91	4.3	1.6	Hoomka	Son hal dergannane
	71	2.08 4.01	2 14 2 77 6 07	0.69	7°12 7°17 10°31	9'52 9'54 6'17	-2'07 +2'14	47 US	46'52	+0.22	4.6	1'8	Ranchi	Hazaribagh Lonarduggs Manbaoom
	6.9	100	THE REAL PROPERTY.				10000		45'41	+0.14	4.0	1.9		
	8.1	1'99	5.18	1.50	7*74	8 76	-1'02	., 32.77	47.77	-15'00	4.0	1'8	Unyebassa	Singbhoom
	7.6	15.56	O ISA										Biosagar	Assam
	7.6	0.10						The same			93.33		Suchar	

Jung cloud amount represents the part of the sky covered, the whole sky being denoted by 10. Under the head District observations of rainfall the normal means frace. The means of the district are the numerical average of the rainfall return received in the district, i.e., from total rainfall at the subdivisional

Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 3rd of October 1890.

	*					INFALL				all or the	TAL		Average		
Meteorological division.	District.	Station.	Saturday, 27th September.	Sunday, 28th September.	Monday, 29th September.	Tuesday, 30th September.	Wednesday, 1st October.	Thursday, 2nd October.	Friday, 3rd October.	Number of rainy days.	Rainfall of week.	Total rain- fall since 1st of September.	total rain- fall from 1st of September.	Total rain- fall since 15th May 1890.	Av.
OBIASA	Pooree	Pooree Khurdah Banpur False Point Gop Satpara Pipli	0°47 1°53	0.71 1.75 0.27 1.22 0.14	0°11 0°56 1°23 0°12 0°13	0°63 0°14	0.44			Nil 2 5	0:82 Nil 2:31 3:04	16-30 13-23 18-52 16-15	10°68 11°16 11°89 P	55-79 56:22 50:95 52:14	
	Control	Jagatsingpore Banki Cuttaok Kendrapara Jajpore Dharmsala Salipore	0.03	1°46 2°17 1°25	0.79	0°19 0°13 0°03	0.13			3 -1 1 3 2	3.00 0.03 0.13 2.33 1.35	17:33 18:99 21:02 16:68 15:01 11:85	9'51 9'38 10'80 9'71 10'29	52.69 54.37 71.66 45.38 46.37	
	Balasore	Chandbali Bhuddruck Sorah Balasore Jellasore Raripodah	1°35 1°45 0°43 0°27 0°68 0°05	0.03 0.20 2.50 2.00 0.10	0°15 4°00 0°02 0°25	0°07 0°04 0°36 0°36	1'05		0.25	1 4 4 4 3 5	1:35 2:68 5:00 2:53 3:04 1:01	13:74 16:52 19:07 22:89 22:05 18:55	11'58 11'26 11'88 12'48 10'85 12'08	43'11 48'08 53'74 56'70 54'26 53'12	
SOUTH-WEST RNG4L.	Midnapore	Contai Saugor Island Tumlook Midnapore Ghattal Kukrahaty Garbetta	0°57 0°50 0°70 0°52 2°05 1°56 0°97	0°79 0°16 3°30 0°12 0°07 0°21	0.66 0.58 0.80 0.66 1.32 3.26 3.25	0°32 0°32			0.02	3 5 4 5 3 5	2:02 1:24 4:80 1:52 3:68 6:03 4:54	15°11 12°52 12°20 7°80 10°-0 13°71 9°02	11'88 12:06 8'80 7'64 9'28	45°67 45°85 50°80 42°37 42°68 40°04 42°65	
	24-Pergurinales	Diamond Har- bour Canning Town Alipore Jail Barrackpore Dum-Dum Buseerhat	0.81	1'18 0'51 2'09 1'13 1'16	1'32 0'70 2'70 2'40 2'30 0'63 0'29	0.05 0.01 0.27 0.08			00 00 00 00 00 10 10	4 3 4 4 5 3 2	3'46 1 98 8'48 7'14 6'72 4'26 0'71	12:34 7:18 12:42 9:13 11:77 9:69 5:31	11'74 P 10'39 7'89 9'32 9'52 9'11	50°32 52°66 52°23 42°50 43°71 43°67 47°78	
	Howrah	Howrah Mohesreka (Ooloberiah)	2°00 1°61	0°92 2°44		0.03		*** **		4	7.25 5.85	9°95 10°01	8.83 8.83	44°28 54°29	
	Hooghly .	Serampore Hooghly Jehanabad	1'12	4 03 3 58 0 03	1:95	0.08 0.08				4 4	7:30 7:43 2:99	10.58 12.59 4.38	8'46 7'71 9'48	45'86 45'88 48'36	
	Rurdwan	Culna Burdwan Cutwa Raneegunge Mankur	0°22 1°40 0°33 1°43	2:35 0:06 4:10 0:35 0:36	1:10 1:56 0:07 0:34	0.03		0.00	1'08	4 4 5 3 3	8'70 3'05 5'67 2'12 1'93	10°91 11°00 15°21 8°03 4°89	7:11 8:34 8:81 7:76	50°14 61°47 58°04 51°61 44°42	
	Hankeora	Bankoora Bishenpore Maliara Khatra Indas Kotalpore Anda Gangajalghat Raipore Sonamukhi	1'48 0'76 1'82 1 12 1'46 e'55 1'24 1 137 2'05	0.04 0.06 0.19 0.29  1.40 0.12 0.74	1'28 2'34 6'10 0'20 2'22 2'05 0'44 0'57	0°36 0°06 0°15 0°56	0.60		0°21 0°40 0°14	3 5 4 3 3 3 6 3	2°75 3°73 2°17 2°21 3°84 2°75 3°04 1°93 3°79 2°57	11 28 10 11 7 63 7 66 6 89 6 63 11 58 10 49 9 64 9 90	8'54 9'48 6'98 10'01 9	53°00 46°50 53°31 34°64 54°23 60°25 46°31 60°88 47°65 48°23	
	Heerbhoom	Bh. Soory Hetampore Rampore Hau Bolpore Murarai	2·29 2·23 2·44 2·02	0°40 0°43 1°18	0°29 1°07 2°70	158 017 018			0°01 0°51	5 5 4 3 1	4'57 4'41 6'50 4'08 0'85	8:58 12:09 12:89 10:25 7:00	10.04 11.31 5 7	55°59 51°03 64°28 52°20 49°35	9119
	Nuddea	Ranaghat Kishnaghur Chocadanga Meherpore Kooshtea	0.14	1'85 2'85 3'40 2'15	2°31 8°25 3°58	0°18 0°05 0°05 0°04				4 4 3 2 4	5'06 5'35 5'73 8'98 4'61	11'02 12'13 8'08 9'16 10'15	7:35 8:41 10:23 8:50 11:00	47 96 53 79 88 81 45 61 45 10	00000
	Khoolna	Satkhira Bagirhat Khoolna Nakipur Rampal	6'90 0'45 1'19	1000	0.08	0'62				3 1 1 1 1 1	2°69 0°90 0°45 1°19 0°87	6°89 5°80 4°83 9°03 8:38	9:37 10:63 10:25 ?	50:09 56:39 44:89 59:90 54:34	200
	Jessore	Narail Jessore Jhenidah Magoorah Bongong	0.23	0°05 1°02 0°05 1°10	2°14 0°57	0.11				2 4 2 3 3	0°79 1°47 3°16 0°81 3°05	1.83 6.00 7.13 2.44 7.86	7:56 9:19 9:57 8:99 9:61	39:44 49:73 49:81 38:25 38:16	
	Moorehedabad	Kandi Berhampore Lalbugh Azimgunge Jungipore Lalgola Jéagunge Akhrigunj Patkabari	0°58 0°57 0°50 1°05 2°20	1.78 0.74 0.78 1.10 1.02 1.45	2°57 3°13 2°03 1°55 1°30	0°20 0°69 9°35 0°20 0°45 0°29	0°43 0°11 0°20	6.10	0.53 0.11 	6 5 3 6 4	7.60 5.52 4.97 3.68 4.06 5.40 4.87 5.30	13:20 9:46 9:77 9:98 7:77 10:78	10°14 11°54 11°16 10°11 11°00 11°28 2	50°81 52°15 56°19 51°42 43°21 55°40 53°36	
EAST BENGAL	Chittagong	Cox's Bazar Chittagong Kutubdia Satkanya	0.03	0.10					 	* 2 1 1	0.74 0.03 1.74 0.37	11.79 11.91 15.54 10.61	15.02 14.18 9 9	124'08 102'04 105'30 77'91	1
	Chittagong Hill Tracts	Rangmati Ruma	0*27							- 1	0.27	7:92	14:04 18:17	68'20	
	Backergunge	Patuakhally Perozepore Burrisal Bhola	0°22 2°62 9°60 0°25	0.10		1111				1 2 1 2	0°22 2°81 0°60 0°30	8°25 7°17 7°43 4°51	14'03 11'97 12'11 13'08	69°53 57'74 55'69 58'15	

tement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 3rd of October 1890 -contd.

					В	AINVAL	L.		All To 1	To	TAL				Armen
grological livision.	District,	Station.	Saturday, 27th September.	Sunday, 28th September.	Monday, 29th September.	Tuesday, Soth September,	Wednesday, 1st October.	Thursday, and October.	Friday, 3rd October,	Number of rainy days.	Rainfall of week.	Total rain- fall since 1st of September.	Average total rain- fall from 1st of September.	Total rain- fall since 15th May 1890.	Average rainfall from 15th May to date.
BENGAL		Gournaddi Bauphal								Nil Nil	Nil Nil	4:50 8:62	9	37.17 64.32	· .
proid.	Nonkholly	Noakholly . Fenny	1°55 0°35							1	1.55 0.35	12:93 9:16	18.76 16.81	82°26 95°87	98.78 96.73
	Furrendpore	Harishpore Ramganj Madaripore	0.62		0.13				0.16	2 2 2	0°77 0°39 1°60	3'97 2'24 5'39	8°88 10°54	33°36 43°42	50:71 53:05
		Furreedpore Goalundo	0.08	0.25	0.94				1'35	2	1.00	6°17 3°43	9:09	38'41 53'61	47.83 63.72
	Dagos	Munshigunge Dacca Naraingunge Manickgunge Joydebpore	0°25 0°14 0°18 0°29 0°58	0'15	0.28	0.87			0:84	1 1 4 2	0°14 0°18 1°81 1°45	1'98 1'99 7'21 8'02	10°59 10°83 8°55 P	48°52 57°45 52°82 59°91	54:14 55:99 45:46
H	Hill Tipperah Tipperah	Agartola Comilla Chandpore Brahmunberia	0°45 0°22 0°60 0°80	0.02						1 3 1 1	0°45 0°27 0'60 0°80	8°32 4°84 4°52 4°92	11 74 11 74 13 27 12 10	56°28 59°03 51°66 49°27	55'04 70'06 69'02 56'02
		Ramchandra- pore Nasirnagar Daudkandi	0°21 0°50 0°15							1 1 1	0°21 0°50 0°15	5.87 2.85 2.90	P 9	67.66 33.01 25.23 65.33	9 9 9
	Mymensingh	Laksham	1.65 0.43		0.60				*****	2 4	1'65 1'03 4'32	3.63 7.98 5.55	14°21 10°20	62°77 47°54	64°51 50°10
		Atia (Tangail) Mymensingh Jamslpore Netrokona Subornakhalla Durgapore ShereporeTown	1'11 0'54 0'54 1'10	0°18 0°35 3°92 1°00 2°94 2°35 1°81	2 35 2:00 5:10 0:30 6:55				0.68	3 3 3 2 1 3 3	2.89 9.56 2.40 9.49 2.35 7.83 9.27	9'86 14'10 10'60 16'80 12'45 12'58 10'49	14'79 14'63 14'51 P	69:12 68:87 85:62 50:97 106:24 57:93 62:43	67:94 59:77 74:42 P P P P
North	Pubna	Pubna	0.51 0.02	6°30 0°79 2°3±	2'51 7'14	0.05				4 3	3.23 9.23	8.85 15.93	11.71 10.03	41'94 50'56	49°16 47°57
ENGAL.	Bogra	Sherepore Nowkhills Bogra	0°48 0°34 0°82	3·10 1·33 3·55	5'90 4'57 8'94 2'34	0.03			015	4 3 3 4	9°50 6°24 13°31 24°49	17'59 11'50 18'44 28'61	10.64 9.77 11.23 11.34	67:09 56:24 67:18 78:56	53'41 48'63 56'65 51'60
	Rajshahye	Panehbibi Beauleah Nattore Naogaon Lalpore	2:26 2:38 5:00	13'50 1'85 5'70 5'08 4'00	2°17 5°05 2°15		0.03	0.40	0°39 0°32	4 3 3 3	6°31 13°13 10°47 6°47 4°25	10°85 20°82 14°24 11°60 6°95	11.65 12.05 13.01 ?	60°94 77°29 56°91 44°04 35°47	49°13 49°80 9
	Maldah	Maldah Chanchal Gajoi	3'45 3'00 6'36	1'85 5'05 4'60 8'40	1°25 0°05 0°15	0.01				4 3 3	9°76 7°65 14°91 5°53	14'43 11'47 21'96 7'78	11.80 11.12 5	57*75 51*29 77*88 49*44	46*74 53*49 9
	Dinagepore	Mohadebpore Churamon Raigunge Dinagepore Baloorghat	7'80 4'12 5'95 2'98 7'62	8'80 6'22 6'25 6'44 6'85	1'82 0'42 1'00					2 2 2 3 3 3	16'60 10'34 12'20 9'79 15'47 9'25	18'02 16'44 15'75 14'00 22'87 18'42	11.64 13.20 11.77 12.23 11.26	59*48 70*50 78*98 72*02 70*62 89*73	53°16 50°11 54°91 59°37 48°94
	Rungpore	Thakoorgaon Bhawanigunge (Gyabanda) Rungpore	1'57 0'45 1'92 0'53	7.67 7.05 10.40 5.45	0°1) 27°00 2°86 0°76				0.82	4 3 4	85'45 15'18 9'84	43°07 23°56 21°67	12.94 14.78 12.90	103.75 76.61 80.62	57'80 69'81 69'34
		Bagdogra (Nilphamari). Ulipare	2°75 0°95	8°25 10°26	0°21 5°80				0°08 0°45	4	11°29 17'46	21°93 23°00	16.53	95°99 80°19	80*14
	Julpigoree	Julpigores Alipore Docar Fallacotta	0.527 0.39	3.76 2.75 3.60 5.65	0.08			1.00 1.00	0°21 1°18 1°63 0°86	5 4 2 4	5°35 5°32 4°63 8°08	22.53 32.25 23.33 23.64	25.10 P P	139*29 175*38 131*34 103*34	112 18 ? ? ?
	Cooch Behar	Debiganj Bhagatpore (Nagrakatta) Dinhatta Cooch Behar. Mickilgunge Matabhanga	0°09 0°87 0°57 0°63 0°42 0°05	2°20 5°21 3°66 4'63 3°55 1'63	0°42 0°42 0°06 0°59 0°56			0°99 0°05 0°16 0°19 0'84 1'63	0°32 0°29 0°50 0°75 0°48 0°27	5 4 4 5 5	4.02 6.79 4.78 5.47 5.50 3.56 6.84	38*41 25*66 30*41 20*66 26*95 28*86 32*52	9 19:17 23:77 20:70 21:30 34:32 15:46	168'46 112'26 157'43 133'50 158'41 191'28 166'85 139'96	89'93 113'52 101'64 107'29 183'52 98 19 100'55
	Hill.	Silliguri Darjeelins Kalimpong	0.76 0.18 0.10 0.58	3.90 6.67 4.22 5.75	0°28 1°95 1°28 2°35	0.01	0.04	0°25 0°44 0°10		5 4 6	9:06 6:04 8:86	16'35 15'69 23'29	18°10 10°71 P	111.60 179.91	74 54 P
tr Bruar	Purneab	Kissengunge Arrareah Purneah	1 '95 2 '31 2 '50 3 '82	5°10 2°50 4°67	0°65 0°50 0°10				0.41	3 4 8 8	7.70 5.72 7.27	16°21 17°04 20°90	14:60 14:44 14:77	92°06 77°76 82°68 88°40	68:76 60:25 57:67 P
	North Bhagul-	Balarampore Matiari Kaliaganj Maddapore Soopool	1°00 0°93 0°33	3:44 5:25 5:09	0.08			0.23	0.70	3 2 4	4-97 6-17 5-59 8-35	25*29 7*37 9*45 8*00	10.32 10.12 5	111.68 58.38 61.80 46.74	45°27 44°98
	Durbhungs	Protabganj Tajpore Durbhunga	3:35 1:24 0:77 0:17	4°26 8°02 2°21	0.58 0.81 0.83		******			2 3 3	5.72 4.40 2.66 6.66	8*45 5*02 4*27 7*33	8'44 9'84 10'51	50°97 56°19 60°52 50°74	39 55 42 30 41 92 ?
3.7	Mozufferpore	Madhubani Bahera Boshero Sitamarhi Mosufferpore Ilaipore Pars Mahua Sishar Pupri	9°76 2°60 9°22 1 43 1°54 1°57 1°60 1°10	5.60 0.36 3.85 2.48 2.20 3.70 0.17 8.70 2.76	0°30  0°40 0°72 0°32 1°00	0.30			0.07	3 4 3 5 4 3 5	8'66 2'96 4'24 4'63 4'06 6'57 1'77 5'00 12'76	7 83 7 83 7 37 5 96 8 29 13 93 5 90 9 75 4 35	9 99 10 34 7 83 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	48'29 50'42 54'57' 47'41 64'81 44'03 48'88 48'35	40'31 41'39 37'74

Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 3rd of October 1890-coneld

					R	AINVAL	<b>L.</b>			Ton	AL				
Meteorological Division.	District.	Station.	Saturday, 27th September.	Sunday, 28th September,	Monday, 29th September.	Tuesday, 30th September.	Wednesday, let October.	Thursday, 2nd October.	Friday, 3rd October,	Number of rainy days.	Rainfall of week.	Total rain- fall since 1st of September.	Average total rain- fall from 1st of September.	Total rainfall since 15th May 1890.	Avera rainti from 1 May: date
NORTH BEHAR -concluded.	Chumparun	Motihari Bettiah Bagaha Burhurwa	0°74 0°60 1°03	4°12 1°68 2°93	0°26 0°14			0.08	0.54	3 4 4	5°12 2°66 4°15	10.66 7.87 9.26	9.63 10.43 9	65:60 60:24 56:32	6
SOUTH BEHAR	Sarun Shahabed	Gopalgunge Sewan Chuprah Buxar Dehree Bhabooah Sasseram Arrah Mohaniah	2:43 1:40 1:94 2:64 2:33 2:45 3:29 2:10 1:00	1'09 0'45 0'17 0'44 0'43 0'20 0'82 1'16	0.02 0.22 0.09 0.15 0.24 0.19	0.03		0.89		2 2 3 3 4 3 5 1	3.52 1.85 2.13 5.30 2.88 2.80 3.85 4.37 1.00	7:38 11:61 5:54 8:46 5:29 7:91 6:66 9:81 6:60	9:53 9:32 7:57 7:67 8:14 7:30 7:52 7:17	51'00 59'03 46'32 50'67 42'79 40'80 43'25 64'56 36'07	387 367 367 367 367 363
	Gya	Aurungabad Gya Nowadah Jehanabad Arwal Daudnagar Sherrghati Rajauli PakriBarawan	2°16 2°96 2°04 2°68 3°10 1°00 1°05 0°35	0°27 2°09 0°72 2°40 1°00 1°11 1°40 2°00	0°04 0°18 0°09 0°15 	0.80	0.02  0.95 0.26 1.00			3 4 3 4 2 2 4 4 3	2'47 5'25 2'19 8'65 5'50 2'00 8'31 2'86 3'35	5°03 6°04 3°80 4°57 6°60 4°70 4°96 3°74 4°69	7'48 7'46 7'34 5'90 9	58'98 59'72 54'41 52'93 55'43 29'65 36'09 45'06 52'27	317 307 307 307
	Patna	Patna Dinapore Behar Barrh Bickram Hilsa	1.14 2.40 0.90 0.70 3.60 1.12	1.51 0.55 3.00 4.00 0.36 2.13	0.22 0.05 0.10 0.30 0.11 0.11	0.07		0.04		3 4 4 3 3	2.87 3.07 4.07 5.00 4.07 3.36	4'94 9'61 7'98 7'80 5'63 7'25	7:37 7:14 6:81 7:97	40.00 50.23 45.85 42.00 56.97 49.17	31 to 37 to
	Monghyr South Bhagul- pore.	Begooserai Monghyr Jamui Gogri Sheikpura Bhagulpore Banka Kolgung	0°32 0°24 0°76 0°89 1°30 1°49 0°38 1°46	2°85 2°92 1°27 3°88 2°10 3°05 1°66 2°70	0.05 0.08 0.13 0.57 	0.08 0.08		0.13		3 4 5 3 2 3 5	3·22 3·27 2·31 5·34 3·40 4·55 2·43 4·60	5'84 6'80 5'07 7'59 4'13 5'68 3'76 7'89	7·62 9·34 7·61 1 1 7·90 8·65	42:08 52:48 58:20 72:10 45:79 54:36 38:74 56:29	513 478 478 5111 5111
	Sonthal Per gunnahs.	Bangaon  Bajmehal Godda Pakour Nya Doomka Deoghur Jamuara Mohagama Nantaat	2:27 0:77 2:65 0:59 1:11 0:72 1:38 0:71	4'75 1'40 1'96 0'94 1'09 0'28 0'15	0°63 0°08 0°71 0°45 0°38 0°32 0°11	0°06 0°10 0°18 0°44 0°15		0°20	0*16	5 4 5 5 4 5 5 4 8 8	7-61 2:45 5:54 2:08 3:10 2:08 1:79 2:23	10°61 3°85 10°87 6°80 5°89 6°27 3°21	? 12:55 10:03 13:32 11:20 9:25 7:75	48°27 45°29 62°13 61°76 45°59 56°35 45°53 27°32	45 % 41 % 50 % 50 % 45 %
CHESTA NAG-	Hazaribegh	Pachamba (Giridi). Hazaribagh Semtagurab Mahudi Hilis Jhoomra Hills Barhi Chatra Karagdaha Ramghar	0°80 1°50 1°45 1°20 0°40 0°80 0°77 1°62	0°48 0°74 0°12 0°62 0°70 0°30 0°47	0°02 0°14 0°50 0°22 0°09 0°04	0°35 0°25 0°37 0°60 0°16	0.07 0.47 0.10  1.10 0.34 0.40	0°06  0°10 2°59	0.08	5 5 5 5 6 4	1.76 2.98 2.18 2.30 1.50 2.77 4.09 5.39	6:87 8:23 7:30 10:00 4:79 4:74 6:01 9:45	9°17 8°82 8°76 9°50 11°36 ?	52'40 49'09 38'29 54'90 47'34 46'21 54'38 48'11	478 478 478 478 478
	Lohardugga	Lohardugga Ranchi Palamow Silli Balumat Hosseinabad Garwah	1'30 1'70 0'81 	0°40 0°19 0°20 	0.03	0°85 0°38 0°09	0°70 0°84 0°48 1°10	0:40	0.07	5 4 6 1	3.62 3.11 1.63 1.10 5.01	7*03 10*13 4*44 5*30	10°27 9°33 8°14	52°53 61°87 44°18 39°20 41°75	46'S 48'S 39'S
	Singbhoom	Chyebassa Chakradhar- pore. Ghatsilla	1:95	0.20	0.07	0.30	0.26		1.32	4 3	2°18	7'74	8-76 ?	32:77 47:56	41
	Manbhoom	Purulis Gobindpore Raghunath- pore.	0.22 0.22 0.22 0.22	0.02 0.17	0.09	===	0.08		0.07	4 4 1	0°77 0°90 0°30	5'66 6'47 8'00	8°37 7°96 ?	41°26 35°14 58°59	67
		Barrabhoom Jhalda Chaz	0.89 0.27 0.89	0.06	0.15	0.02	2°33 0°12		3.03	9 5 9	0°85 6°04 0°45	5'98 14'17 5'52	?	42°25 61'55 44'98	

Suplantion. .....indicate that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the rewarding, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 7th October 1899.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING FRIDAY, THE 3RD OF OCTOBER 1890.

At the end of the previous week the depression which had commenced off the Circars was in the Central Provinces, but had ceased to move in a westerly direction, and at the beginning of the present one was moving to the east-north-east. Its influence in Bengal, even when furthest west, was apparent in the easterly winds and general rainfall, but, as from its commencement, wind velocity was generally low. On Saturday the 27th the area of lowest pressure was partly over Chutia Nagpur where pressure was falling briskly, and as there was a general rise elsewhere, the depression diminished very little in intensity. Winds were south-west or south in Lower Bengal, and were beginning to get stronger at the head of the Bay and at some of the stations in South-West Bengal. Moderately heavy rain fall over the whole province on this day, but in the south-east as well as in Orissa weather was improving, and very little rain fell after the first day of the week. On Sunday the 28th, pressure had risen rapidly at the western stations, and the depression was rapidly filling up, but being now well over Bengal, weather was more unsettled, especially in Behar and North Bengal, where very heavy rain was falling. Lowest pressure from being between 29.6 and 29.65 was over 29 75 inches, and moderate southerly winds were blowing in all districts except North Bengal and Behar, where north-east winds of considerable strength continued. As the depression was filling up, thunderstorms with heavy local falls of rain became general over almost the whole province, especially in the north-east corner. One of these gave stormy winds at Mymensingh, and seems to have been somewhat of the nature of a tornado. On the 29th lowest pressure was again over the Circars, but the distribution was rapidly changing, and by the end of the month became very uniform with a diffused low-pressure area covering the whole of the Bay, with a faint indraught across the coast. Light scattered showers fell in Orissa and Chutia Nagpur on the 30th, but elsewhere rain had almost entirely ceased. The tendency to greater uniformity continued on the 1st of October, and the light winds changed from east to west except in Assam, one apparent result of which was the commencement of rainfall in North Bengal, brought by local storms due to the interaction of these opposing currents. Up to the end of the week these showers were confined to North Bengal and were generally light, rarely exceeding one inch.

Pressure was about '2 inch below the normal at Hazaribagh and Dehree at the beginning of the week, when there was considerable increase in steepness of the gradients over Bengal owing to a brisk fall in Chutia Nagpur and a brisk rise in the eastern districts, the relative change being about '15 inch. A rapid rise occurred in Chutia Nagpur and South Balance the 28th and 15 inch. A rapid rise occurred to Chutia Nagpur and South Balance the 28th and 15 inch. South Behar on the 28th, exceeding 22 inch at Dehree, and though rising over the whole province, the rate diminished rapidly towards the east. The rapid rise continued in the central districts on the 29th, and the area of lowest pressure was forced southwards as far as the Circars, after which pressure rose slowly until the distribution was very uniform over Bengal and the Bay. Mean pressure for the week differs very little from the normal, and is generally above by verying amounts under 192 inch.

and is generally above by varying amounts under '02 inch.

Temperature was very low while the disturbed conditions lasted, and it recovered rapidly after the skies cleared during the latter half of the week. The means are all below the normal, defect being 5.5° in South Behar, 4.9° in North Behar, 3.8° in Chutia Nagpur, 3.5° in North, Bengal, 1.8° in South-West Bengal, 1.2° in Orissa, and 4° in East Bengal, the southern part of which was but slightly affected by the depression. Some very low minimum temperatures were recorded during the week, the lowest being 64.8° in Chutia Nagpur, 65.6° in North Bengal, 66.5° in Behar, and between 71° and 72° in Lower Bengal. On the 27th defect was between 6° and 7° in Behar, but by the following day it had increased to between 10° and 12° at the more western stations, and on the 29th in the whole of Behar and North 10° and 12° at the more western stations, and on the 29th in the whole of Behar and North Bengal. After the filling up of the depression there was a rapid rise in these districts, and a steady rise continuing, defect by the end of the week was replaced by an excess of about 3° in the lower districts and 1° in Behar and North Bengal.

Rainfall was general and rather heavy in Behar, Chutia Nagpur, and South-West Bengal on the 27th.

on the 27th. On the 28th it was much heavier in the northern districts and lighter in Chutia Nagpur and South-West Bengal, many of the falls in Behar and North Bengal being over 5 inches. The area of heavy rainfall was transferred gradually to the east, and on the 29th only a few heavy showers fell in the contiguous parts of East and North Bengal, after which rain almost entirely ceased except in the south west corner, where fairly general light shows fell. The week are all largely above the normal except. after which rain almost entirely ceased except in the south west corner, where fairly general light showers fell. The mean falls for the week are all largely above the normal except in Orissa where there is a small excess, and in East Bengal where there is defect of '7 inch. The very heavy rainfall of the first three days of the week in North Bengal is shown by the weekly mean for the whole district being 11·1 inches, or 9·36 inches in excess of the normal. In North Behar excess is 2·78, in South Behar 2·49, in South-West Bengal 2·77, and in Chutia Nagpur 1·13 inches. In East Bengal falls were generally below 1 inch except in the Mymensingh district, where they varied between 1 and 10 inches, in South-West Bengal and Orissa they ranged up to 7 inches, in North Bengal they were generally between 5 and 10 inches, the heaviest being Panchibi 24·49, Ulipore 17·4¢, and Mohadebpore 16·6, Baloorghat and Rungpore over 15 inches, and in Behar and Chutia Nagpur they were nearly all between 2 and 4 inches. The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 3rd of October 1890:—

	1		TEMP	BRATU	RE.		17			I	LAINPA	LL.				
	week,	week,	Avera	ges for	week.	above or week.		Of wee	ok.	R	ainy d	sys.	of 8	ee 1st ie: tem- er.		e 15th
METHOROLOGICAL DIVISIONS.	Highest observed during	Lowest observed during	Of highest of each day.	Of lowest of each day.	Of mean for each day.	Average mean of week i	Average.	Normal average.	Variation.	Average number in veek.	Normal average num- ber in week,	Variation.	Average.	Normal average.	Average.	Normal average,
Orisas	93.4	73.8	87.3	77'7	82'5	-1.5	2.04	1.75	+0.50	2.9	2'5	+0.4	17.52	10.91	52:36	45*44
South-West Bengal	93'3	71.7	8618	76'3	81.3	-1.8	4'01	1:24	+2.77	3.7	2.5	+1.5	9'46	9.52	48'68	47.12
East Bengal	91'5	71'1	87.1	76.5	81.8	-0.4	1.81	2.01	-0.70	1.7	2.7	-1.0	7:30	12.78	64'77	67-63
North Bengal	90'7	65.6	83.8	78'5	78.7	-3.5	11.10	1.74	+9'36	3.2	2'3	+1'2	19.85	14'05	83.19	64.77
North Behar	92.8	66.9	89.7	72'7	77-7	-4.9	4'58	1.80	+2.78	3.0	16	+1'4	9.58	10'52	60.90	45'09
South Benar	90.7	67'3	82.1	73*1	77.6	-5.2	3:52	1.03	+2.49	3'8	1.2	+2.3	6.63	8'34	50.85	40.06
Chutia Nagpur	86'0*	64'8"	78'9*	68.1*	78'5"	-3.8*	2.13	1.00	+1'13	4'6	1.8	+28	7:04	9.12	43'88	45*52

<sup>\*</sup> Chyebasss not included.

METEOBOLOGICAL OFFICE, BENGAL;

The 7th October 1890.

C. LITTLE,

Offg. Meteorological Reporter to the Govt. of Bengal.

Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of September 1890.

	Inches.	Date, Hour,
The mean pressure of the month	29-694	
mi	29.682	
min to the second of the member	29 906	30th 10
TOL 1 in the mouth	29 537	15th 16
PMI P	0.369	2012
	Hours.	
The total number of hours of bright sunshine during the mont		
	367.0	
	0	
The mean temperature of the month	82.5	and the second state
The average temperature of September from 24 years' registe		
m 1:1	92.7	5th
my 1	718	27th.
mi f	20.9	~
The mean daily range of temperature	10.7	
my	16.4	5th.
The greatest range or resignation in our day	Per cent.	
Who were hamidity of the month	07	
The average humidity of September from 24 years' registers .	85	
	Inches,	
	0.966	
The average vapour pressure of September from 9 years' register		
	6.35	
The average cloud proportion of September from 13 years		
	7.09	
	12.53	
The total rainfall indicated by a Beckley's self-registering rain	1 11.00	
gauge (mouth of the gauge about 52 feet above the ground		
	10.18	Owil
The greatest fall in 24 hours	3.41	27th.
The number of rainy days in the month	Days.	
The average number of rainy days in September from 24 years		
registers	01	
The mean maximum equilibrium temperature of solar radiatio		
	145.0	
mi 1:00 f and -in terminal	57.5	
mi	161.4	12th.
mi total and a firm over air temperature	70.6	12th.
The mean temperature of the nocturnal radiation thermomete		Laut.
on woollen cloth	75.2	
The mean depression of the nocturnal radiation thermomete		
below the minimum air temperature at 4 feet above th		
ground	2.0	
The greatest depression of the nocturnal radiation thermomete		
below the minimum air temperature	3.1	30th.
	Miles.	
The mean movement of the wind per day	70.7	
test and the second sec	176.0	23rd.
	13.0	23rd noon to 1 P.M.
The number of hours with winds from each of the 8 points—		TOTAL BOOK TO I P.M.
N I N D 17 D 187 S D 170 S 115 S W CO W C	N W O C	1. 100

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore '003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently equal; and finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0.6 higher than the Kew standard thermometer which is the standard of reference at the present Observatory.

N. 1, N.E. 17, E. 167, S.E. 172, S. 115, S.W. 69, W. 8, N.W. 3, Calm 168.

J. H. GILLILAND,

METEOROLOGICAL OFFICE, INDIA; Calcutta, the 6th October 1890.

For Meteorological Reporter to the Govt. of India.

Results of the Meteorological Observations taken at the Alipore Observatory from 28th September to 4th October 1890.

			lo s	barometer		Темркі	LATURE.			HYGROM	ETRY.		WIND.	7.1		
Month.	Date.	Maximum in sun.	Number of hours bright sunshine.	Mean pressure baron at 32° Fahr.	Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour pressure.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.	Rain.	WRATHER,
		0		Inches.	0	0	0	0	0	Inches	0	%			Inches.	
Sept.	28th	147.4	15	29 743	78:8	84.5	11.1	73-4	76.9	0.899	76.0	91	S by E, SSW and SE by S.	120	2.75	Chiefly cloudy,
**	29th	14:59	6.1	-813	79-8	85-9	12.2	73.7	77.6	.921	76.7	90	SE, calm and variable.	48	0.99	Partially cloudy
,,,	30th	147 .8	9.8	843	81.0	86.5	12.2	74:8	77:7	905	76 2	86	ESE and calm	17	Nil	Chiefly clea
Oct.	1st	146-7	8.7	·841	82:1	87.7	11:8	75-9	78.4	923	76:8	84	Calm and variable	19	,,	Chiefly, clear.
n	2nd	148:5	10-7	-820	82-9	88 5	11.8	76-7	79-3	-953	77-8	85	SW and calm	50	",	Chiefly, clear.
v	3rd	151.5	9.2	-786	82-6	89.7	12.0	77-7	79-1	952	77 7	86	SW by S, SW and variable.	74	0.33	Chiefly, clear, o
311	4th	144 4	6.2	.750	80.7	86.4	12.2	74-2	77:4	-897	75.9	86	SW by W and calm	32	0.05	Partially cloudy

			The Marketon	ALL ALL THE		
			ALLA.		Inches.	
	The mean pressure of the seven days				29.799	
	The average pressure of the corresponding period for	24 years,	SG.'s O	thee	29.750	
					Hours,	15.0
	The total number of hours of bright sunshine				52.5	
	The maximum possible number of hours of sunshine		***	6	83.3	
		117.5			. 0	
	The mean temperature of the seven days				81.1	
	The average temperature of the corresponding period	for 24 ve	ars. SG.	s Office	83.4	
	The extreme variation of temperature	The second second			16.3	
	The maximum temperature		Co., 12 7	1	897	
	The maximum temperature	DETAILS DESCRIPTION		Silv Barrier	The second second	
					Miles,	
	The highest velocity of the wind in one hour	***		***	10	
					lbs.	
	The highest pressure of wind on one square foot		1	Approximat	ely 6	
					0/0	
	The mean relative humidity				% 87	LEED!
	The average relative humidity of the corresponding	period for	24 years.	SG.'s		
	Office				83	
		A Land Bridge			Inches.	
	M . 4 -4 -1 4-11 of min from 9941 C . 4 4 - 441 O	4-1 190	0	must be a large	1	
	The total fall of rain from 28th September to 4th O	ctoper 109	2 000		4.12	
	The average fall of the corresponding period for 24 y	rears, SG.	8 Omce	***	1.62	
	The total fall from 1st January to 4th October 1890				53.08	
	The average fall of the corresponding period for 24 y				59.76	
0	mean pressure temperature &c are deduced from the	ne trance of	the Ba	rogranh an	d Thorn	agreent

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground. o, overcast; g, gloomy; p, passing temporary showers; d, drizzling rain; t, thunder; a, dew; =, fog; <, lightning.

J. H. GILLILAND,

For Meteorological Reporter to the Goot. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA; Calcutta, the 6th October 1890.

Abstract of the Results of the Barometric and Thermometric Observations taken at 10 a.m. at the Meteorological Office, Chowringhee, in the month of September 1890,

			Inches.	Di	ate.
The mean pressure at 10 A.M. during the month			29.753		
The mean temperature at 10 A.M. during the month		***	85.3		
The highest temperature during the month			94.0	5th.	010
The lowest temperature during the month			74.6	28th.	
The absolute range of temperature during the month			19.4		
The mean daily range of temperature during the mont	h		11.1		
The greatest range of temperature in one day during t	he month		16.7	16th.	
			%	-1	
The mean 10 A.M. humidity during the month	***	***	80		
The mean 10 A.M. vapour pressure during the month			inches.		
The total mainfall of the month		1	11:60		
mb a areatest fall in 94 hours		***	3.02	97+h	
The greatest fail in 24 hours	***	***	Days.	64 611.	
The number of rainy days in the month			19		
		2000	210		

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, 1NDIA; The 6th September 1890.

36

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 28th September to 4th October 1890.

1	Sin	A. M.			Твирь	RATURE,			H	YGROMETRY	r. '	hours.
Montg,	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	Daily mean.	Maximum.	Range.	Minimum,	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour pressure at 10 A.M.	Dew point at 10 A.M.	Humidity at 10	Rainfail past 24 ho
	14.	Inches.				. 0	0	0	Inches.	0	%	Inches
September October	28th 29th 30th 1st 2nd 3rd 4th	29.762 -863 -915 -913 -888 -859 -326	79·8 80·4 81·8 83·2 83·8 85·1 82·2	84·9 85·9 88·8 90·0 90·4 90·0 89·0	10·3 11·1 14·0 13·6 13·2 13·8 13·7	74·6 74·8 74·8 76·4 77·2 78·2 75·8	88-6 81-6 84-9 86-6 87-0 86-6 83-0	80·5 79·5 79·5 79·5 79·5 81·5 78·5	1:001 :981 :936 :914 :908 1:008 :916	79·8 78·7 77·2 76·5 76·3 79·5 76·6	87 91 78 72 71 80 81	0.72 2.60 0.45 

				inches.
The mean 10 A.M. pressure of the seven days .				29.861
m e a		***		82.3
The extreme variation of temperature .	•			17.4
The maximum temperature		•••	•••	92.0
				% 80
The mean 10 A.M. relative humidity of the seven	days	•••	•••	Inches
77 - 4-4-1 8-11 - 8 - 1- 8 0041 C - tomber 4- 44	1 October	1900		4.07

The total fall of rain from 28th September to 4th October 1890 ... 4.07

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,

For Meteorological Reporter to the Goet. of India.

METEOROLOGICAL OPPICE, INDIA; The 6th October 1890.

#### MEMORANDUM.

Weekly review of births and deaths in twenty-seven of the principal towns of Bengal for the week ending with Saturday, the 20th September 1890.

#### BIRTHS.

The births registered during the week ending with Saturday, the 20th September 1890, in twenty-seven principal towns of Bengal correspond to an annual rate of 26.6 per 1,000 of the aggregate population of those towns, which is 1,061,574. This rate is 2.5 higher than the average rate of the corresponding week of the past five years, and is also higher than the rate of the corresponding week of any of the past five years except 1885 and 1889—vide the figures below—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of births per 1,000 of the population per	27.5	23'4	18'4	22.1	28.9	24'1	26'6

The births registered in each of the last four weeks in each of the twenty-seven principal towns correspond to the following rates per 1,000 of the population:—

	, V	VERKS EI	nding-				V	VEEKS E	NDING-	
Towns.	30th August 1890.	6th Sept. 1890.	13th Sept. 1890.	20th Sept. 1890,	Town		30th Angust 1890.	6th Sept. 1890.	13th Sept. 1890.	20th Sept. 1890.
Burdwan Midnapore Hughli and Chinsurah Serampore Utterpara Howrah Bali Krishnagar Ranaghat Santipore Jessore Rampore Beauleah Darjiling Dacca	 17:0 29:5 31:4 9:4 17:2 14:0 11:4 7:0 42:0 33:4	53'4 17'0 39'4 39'3 37'7 13'2 10'5 34'1 6'0 22'8 34'2 29'6 11'7	53°0 9°3 59°4 31°4 27°7 21°8 17°5 26°5 12°2 39°4 87°0 14°9	91 4 18 9 89 4 45 1 37 7 21 8 10 5 17 0 12 0 14 0 15 6	Narainganj Chittacong Comillah Patna City Gya Arrah Mozufferpore Durbinanga Chupra Bhagulpore Monghyr Purneah Poori		12'4 4'7 34'7 10'1 26'0 16'7 9'7 37'0 4'0 25'3 28'0 10'4 4'2	29°0 9°4 27°0 17°2 30°1 79°0 25°5 22°0 26°2 30°8 45°2 20°8 10°5	20°7 9°4 11°6 15°3 26°0 16°7 7°3 22°8 28°2 30°8 38°9 10°4 14°7	37:3 4:7 19:3 14:6 42:4 57:4 25:5 37:0 38:2 19:9 46:1 10:4 12:6

It will be seen that last week the highest birth-rate was returned from Rampore Beauleah (57.8), and the lowest from Chittagong (4.7). No births were registered during the week in Jessore town.

#### DEATHS.

The deaths registered during the week under review correspond to an annual rate of 23.4 per 1,000 of the population. The rate of the week is 7.4 below the average rate of the corresponding week of the past five years, and also below the rate of the corresponding week of any of the past five years except 1887—vide the figures below—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of deaths per 1,000 of the population per annum	87*4	31'5	2215	28'7	33'8	30 8	23'4

The deaths registered in each of the last four weeks in each of the twenty-seven towns correspond to the following rates per 1,000 of the population:—

	Wı	EERS E	NDING-	-			WERKS 1	INDING-	
Towns,	30th Augus 1896.	6th Sept. 1890.	18th Sept. 1800,	20th Sept. 1896.	Towns.	30th August 1899.	6th Sept. 1890.	13th Sept. 1890.	20th Sept. 1890.
Burdwan Midnapore Hughli and Chinsurah Serampore Utterpara Howrah Bali Krishnacat Ranaghat Santipore Jessore Rampore Beauleah Darjiling Dacca	36.1 33.4 28.3 19.5 31.6 9.5 12.0 6.8 18.4 21.0	16'8 17'0 18'1 43'2 28'3 10'9 14'0 11'4 12'0 15'8 36'7 18'4 59'2 13'0	29°0 20°1 37°7 53°6 28°5 13°7 10°5 22°7 6°0 19°5 42'8 39°4 14'8 28'5	10'8, 17'0 24'6, 29'4 28'3 18'2 38'6 11'4 29'9 14'0 18'4 31'5 14'8	Narainganj Chittazong Comillah Patna City Gya Arrah Mounferpora Durbhanga Chupra Bhngulpore Monghyr Purnean Poori	12.4 5.4 11.6 16.2 58.7 8.4 19.5 44.8 11.1 19.0 50.8 26.2	16.6 18.8 19.3 26.9 58.1 29.9 20.7 39.3 82.5 23.5 27.1 10.4 48.3	16'6 9'4 27'0 20'4 40'3 15'6 24'3 22'8 39'2 18'1 21'7 13'9 31'5	16.6 14.1 19.2 14.3 35.1 35.2 26.8 36.2 28.2 17.2 36.3 17.3 21.0

It will be seen that last week the highest mortality occurred in the town of Gya (38.9) and the lowest in Krishnagar (11.4).

Measured by last week's mortality, the highest annual death-rates from the following registered death-causes were as follows :-

	Cholera.				Fever.			Other causes.	
		,	Ratio pe	<b>,</b>		Ratio pe	ır		Ratio per mille.
Chupra Durbhanga Mozufferpore Patna City			10·1 9·4 4·9 4·2	Arrah Bali Ranaghat Rampore E	Beauleah	25·1 24·6 23·9 23·6 21·8	Gya Poori		15·7 10·5

The total mortality from the several registered death-causes in the twenty-seven principal towns amounted to 2.3 from cholera, against 3.5 per 1,000 in the preceding week; 3 from injury, against 5; and 7.2 from other causes, against 7. Fever and bowel-complaints exhibit the same ratios as in the preceding week, viz. 11 and 2.6 per 1,000 respectively. No death was recorded under the head small-pox during the week under review.

The mortality of last week according to Sex, Class, and Age was as follows:—

According to Sex.		According to	Class.		According to	Age.	
	Ratio per mille.			Ratio per mille.		1	Ratio per
Males Females Ratio of male deaths to every 100 female deaths, calculated on the proportion such mortality	24·4 22·2	Christians Hindus Mahomedans		14.9 23.3 23.8	Under 1 year 1 and under 5 yes 5 , 10 , 10 , 15 , 15 , 20 , 20 , 30 ,		14·1 9·7 12·2
bears to the total male and female population	110				30 ,, 40 ,, 40 ,, 50 ,, 50 ,, 60 ,, 60 years and upware	:::	11·9 18·7 23·6

Detailed information regarding the vital statistics of the twenty-seven principal towns dealt with in the above review will be found in the statement appended.

W. H. GREGG, Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

The 6th October 1890.

1	i		3			•			8	20	6				7							8				9	10		1	1	11
		PO	PULATI	ON				BIRT	RS.				1						M	ORTA	LITY	Acco	RDIN	10-TO	-					TARK.	
		10	ULATI	WAY.												10		p	isesae	s	12			*		-bue-			Se	er.	1
DISTRICTS.	NAMES OF MUNICIPALI				Num	IBER O	»-	OF P	O PER OPULAT L'ANNU	ROIT	ha to every		4	DRAT	HS FR	ом-			RAT	IO PR	R 1,000	OF PO	PULA	rion )	ER	in the	DEAT		RATIO 1,00 POPUI		#225E
	TIES.	Males.	Females.	Total.	Males.	Pemales.	Total.	Males.	Pemales.	Total	Ratio of male hirths 140 female births.	Cholers.	Small-pox.	Fevers.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Cholers.	Small-pox.	Pevers.	Bowel-complaints.	Injury.	Other diseases.	causes.	Ratio of deaths per lation per annum vicus week.	Malos.	Females.	Males.		Ratto of male deceased on the calculated on the tion such mortality the total male and
Surdwan	Burdwan	18,068	16,017	51,086	9	5	14	13'7	76	21-4	180			7	1	1	4	13			100					daya					
Ednapore	Midnspore	16,927	16,633	33,560	5	4	9	7.7	6-2	13-9	125			8	9			11	***	***	10.7	1.2	1.2	6.1	19.8	29.0	7	6	50.5	19.5	103
Hughli	Hughli and Chinsu-	15,858	15,829	31,687	15	9	24	24'6	14.8	39.4	166			8	1	***			***	***	4.6	3.1		9.3	17-0	20.1	9	2	27.6	6.3	438
	enh. Serampore	13,559	12,937	26,496	18	8	23	85.3	9.8	45.1	360	***	***	4	5		.6	15	***	***	13.1	1.6	***	9.8	24.6	100	9	6	29.5	19.7	150
erampore {	Utterpara	8,046	2,464	5,510	2	9	4	18'8	18'8	37.7	100			1		1	0	10			7.8	9.8	5.0	9.8	29.4	23.0	10	. 5	38:4	20'1	191
,	Howrah	58,153	37,660	90,813	18	20	88	10'3	11'5	21.8		***	500	100		***	2	100	***	***	9.4		in.	18.8	28.3	28.3	2	1	84.1	21.1	161
owrab	Bali	7,836	6,979	14,815	2	1	3	7'0	3.2	10.5	90	***		14		***	7	23		***	8.0	11	100	4'0	13.2	13.7	13	10	12.7	13.8	92
		13,263	14,314	27,477	9		9	17.0		17.0	200			7	2	1	1	11	***		24'6	7.0	3.2	3.9	38-6	10.2	6	5	39.8	37.3	106
udden	0		4,655	100000	1		2	6.0	6.0	12.0	No female birth.		***	3		***	3	6		***	5.7		***	5.7	11.4	22.7	4	2	15.7	7:3	215
	0	4,028		8,683	3		8	5'2	8.8	14.0	100		***	16		•••	1	5		***	23.9		***	6.0	29-9	6.0	8	2	38.7	22.3	173
essore	Jessore	18,708	15,979	29,687				Post C	25,24	1000	60	***	***		1	1	2	8	***	***	7.0	1.7	1.7	3.2	14.0	19.3	4	4	15-2	13.0	116
ajshahye	Rampere Beauleah	4 830	3,665	8,495	11	- 11	22	28'9	28'9	57.8		144	***	1	1		1	3	144	***	6.1	6.1		6.1	18.4	42.8	2	1	21.2	14.2	151
ariting			9,025	19,791		11112	5	82.2	17.3	12574	100	***	***	9	***	***	3	12	***	***	23.6			7.9	31.5	39'4	4	8	19-3	46'1	43
mejitting	Darjiling	4,579	2,439	7,018	8	2	94	100	14'8	37.0	150		111	2		**	***	2		***	14'8		***	***	14.8	14.8	2		22.7	***	No female
acoa	Ducen	42,782	87,379	80,161	12	12	9	78	7.8	15.6	100	3	***	13	8		9	33	1.9	***	8'4	5'2		5.8	21.4	28.2	24	9	29-2	12'5	death.
	Narainganj	7,605	4,956	12,561	6	8	2	24'8		37.3	200		***	2	- "		2	4		***	8.3			8.3	16.6	16.6	3	1	20.2	10.2	195
hittagons	Chittagong	13,540	8,790	22,130	1	1		2.3	2.3	4.7	100	***	***	3		***	3	6	***	***	7.0		144 1	7.0	14.1	9'4	3	3	11.7	17.7	66
ipperah	Comiliah	8,153	5,353	13,506	2	3.	5	7.7	11.6	19.3	66	440	1	3		7	2	5	***	***	11.6			7.7	19.3	27'0	- 3	2	19.1	19.4	98
atna	Patus City	78,762	81,475	160,237	31	14	45	10.1	4.2	14.6	221	13		12	7	1	13	46	4.5	***	3.9	2.3	.3	4'2	14.9	20.4	20	26	13.2	16.6	79
ys	Gya	38,290	37,831	76,121	29	33	62	19.8	55.9	46.4	89	2		32			23	57	14		21'8	***		15.7	88.9	40.3	21	36	28'5	49'5	67
hahabad	Arrab	20,960	22,505	43,465	24	24	48	28.7	28.7	57.4	100	2		21	- ***	***	7	30	2.4		25.1			8'4	85.9	15.6	15	15	37.2	34.7	107
lozusterpore	Mozufferpore	23,084	19,658	42,742	9	12	21	10.9	14.6	25.5	75	4	***	18	1		5	22	4.9		146	1.5		5.1	26.8	24.3	12	10	27.0	26-5	102
burbhanga	Durbhanga	83,774	32,522	66,096	26	= 21	47	20.2	16'5	37-0	124	12		18	6		10	46	9'4		14'2	47		7.9	36-2	22.8	24	22	37.0	35'4	104
arun	Chuprs	25,116	26,554	51,670	22	16	38	23.1	16.1	88-9	137	10		5	4		9	28	10.1		5.0	40		9.1	28.2	39-2	17	11	35-2	21.2	168
hagulpore	Bhagulpore	29,640	27,813	57,453	12	10	55	10 9	9.0	19-9	120		1	11			8	19	1.4		10.0			7:2	17.2	181	n	8	19.3	150	128
longhyr	Monghyr	28,154	29,366	57,520	31	20	51	28.0	18.1	46.1	155	***	140	18	9	. 1	11	39			16-8	81	·p	9.9	35.3	21-7	20	19	36.9	33.9	109
urceah	Purnesh	8,463	6,553	15,016	***	8	3	***	10.4	10.4	No male			5				5			17'3				17-8	13.9	1	4	6.1	31.7	19
Poori	Poori	18,247	11,537	24,784	1	8	6	2.1	10.2	12.6	birth.			2	3		5	10			4.5	6.3		10.2	21.0	31'5	10		39.3		No female
10151022		-	-		-	948	544	14'9	33'8	70 a		1	_	1	530					"			-			-	14		26.2	***	death.

						Ole	LSS.													9		Ag	re.			5			1	M	
DISTRICTS.	NAMES OF MUNICIPALI- TIES.		DRAT	HBAM	ong-		RATI	O PER	1,000 c	P Pop	ULA-			9		DBAT	гне.		N		256		1	RATIO P	BR 1,000	OF POP	LATION	PER AN	NUM,		
	194 ty	Christians.	Hindus.	Mahomedans	Budchists.	Other classes,	Ohristians,	Hindus.	Mahomedans,	Buddhists.	Other classes.	Under 1 year.	and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	50 years and up-	Onder 1 year.	land unders years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years,	40 and under 50 years.	50 and under 60 years.	60 years and up-
Bardwan	Burdwan		6	7				13'2	35'5			2		1			2	1	3	1	3	157-6		22.3			13-1	7'5	35'3	21-2	105'3
Midnapore	Midnapore	1	9	2	***	.4.		18'0	14.4	1000		2	***	1				1		1	3	140'0	Marie 1	FRAN	100			9.4	55'8	25.2	85*2
Husbi	Hughli and Chin-	447	10	5				20:6	42.2			5.	. 2		9		1	9	1	1	1	323-8	46'9	7.	41'9		8'4	18'9	12.5	20.0	25'1
Serampore	Serampore		12				-	24.7	165-3			3	1			1	13			134	5	2197	28-8	20.7	A AL	23 8	Somet.	THE PARTY	46.5	27'2	186.9
	Utterpara	1	3	1	1	1		29-3				1	*		1		""	***		WI					100-0	100			0.08		2000
Warran 5	Howrah	1	17	5		600	27.5	13.0	12.7			4	-6.		1	1.		."		1	1	323-0	***		108'6	***		10.8	13.3	9.2	277
Howrah {	Ball		7	4	1			27'1	158.7		T SE	8		3	1	1			. *	1	2	100.8	46.9		7.9	71	4.6		F   C	49.6	213-1
- (	Krishnager			2	5.5			11.5	12.6	DE.	***					***	"	***			3	430.9	52-1	146'3		11	-	-			
Nuddes	Ranaghat	***	5					35.2		""						""		***			1	419-4	***	110		***	***		."	24'7	30.1
	Santipore		7	1				17.6	5.8	***			1		1	***		1	***		***	***	***	46.6	59.9	***	"	41.7	1 "	143-6	
Jessore	Jessore	16.3	1	2		***		11'5	27.2	***	***	18	124	***	1	**	17.	2		***	1	184.6	17.9	•••	17.9	**	*	240			26'5
Rajshabye	Rampore Beaules!	1		8			PER I	21.0	42.4	***	***		000		""	***	1	***	1	***	***	***	105'3	***			25.8		49.5	***	
Darjiling	Darjiling	1	9			***		21.6	1.00	***			1		2			***	2	***	***	384.3	36.7	100.0	57.7			***	42.4	***	**
	Daces		23	(DE)		""	-	1	10.0	""	***	-	2	***		-	***			***		***	161.7	***	***	***		***	***	***	***
Dacca	Naraingani		1	3	""	***		29.7	13-2		***		2	3	3	3	5	1	6	1	- 4	137.0	14.1	15.7	19.6	21'4	17.0	4'5	37.9	11.0	37:3
Chittagong	Chittagong		1			***	28.0	8.5	25.3			1	1			***		1	***		1	186'4	45.6					24'3	***	***	79-8
Tipperah	Comillah		1		***	***	65.3	B0 (0)	13.6			2	1	1		***	1	198	. 1		***	184'7	26-4	20.8			11.3	•••	53.0	***	***
Patna	Patna City		35		"			8.7	28.1	- ***		2	1	244		1			1	***	***	350'2	39-8		***	41.3			39.6		***
Gya	Con	-	50		***		-	15.3	14.0		***	5	8	3	1	3	6	3	2	3	18	60.3	28'5	9.3	3.6	14.0	10.8	6.7	5.2	11.0	45'2
Shahabad		1		150	-			43.3	55.8	-	***	11	10		3	3	8	7	4	- 5	11	819-6	81.8	***	23-2	29.8	10'6	28.6	21 3	39.6	1111
Mozufferpore	Mosufferpore	-"	19			***	***	31.9	46'1	***	***	9	1	2	***		3		3	2	6	363.4	11.7	20'3			19.9	32-3	33.3	33.6	108*2
Durbhanga	Dunbhanna	15	18		***	***		31.5	16.7	***	***	4	6	1	1	1	4	1		2	2	217'8	77.2	11.6	13.1	17.2	24'2	7.5	***	32.0	42.7
darun	Chupes	1	32	4850	***			34.4	41.4	***	***	8,	6	5	2	1	4	4	6	5	5	267-2	41.0	33.2	18.7	12-9	15.6	18.6	41'9	59-3	81'4
Bhagulpore	Bhagulpore		17	111	***	104		22-3	48'0	***	-01	- 8	3	1		. 2	* 3	2		4	5	294'8	80-2	8.7		30.0	16.9	13.4		50'3	76'4
Monghyr	Monghyr		15	4		-	***	19:6.	12:1	***		7	***			1	2	3	1	2	3	304.9				12.4	9.2	16.8	8.3	24'4	43.3
Purneah	Porposh	-	30	9		***		24:9	37:3			12	7	4		2	2	3	. 1	1	7	420.2	58.2	29.5		27.5	10.1	17.5	8.2	13.1	101.2
Pocri	Poori	***	1		***			5-7	36.7	***		3	***				1		***	1		551'2				***	15'8	*115		55'5	
		***	10			-44		21'2	***			3	1						3		3	514'9	28.9	Value of		144			46.9		86'4
	TOTAL	2	340	135			14.9	23.3	23.8	-		110	61	30	19	10	100			_	-	-	0.507	100		-	0:0	11:0	18-7	23.5	62.5
Company of the Company			112									110	01	80	18	19	40	40	45	35	79	235'8	34:1	14/1	9.7	12.3	9.9	11.9	18 4	200	02

Office of Sanitary Commissioner for Bengal,

The 6th October 1890.

# CIRCULAR AND EASTERN CANALS.

Approximate Return of Traffic for the week ending Saturday, the 4th October 1890, as compared with the corresponding week of the previous year.

		WHEE EN	DING SATURE	990, THE	WERK EN	DING SATURD II OCTOBER 188	AY, THE 19.
NATURE	OF CARGO.	Number of boats.	Weight of cargo.	Tollage,	Number of boats.	Weight of oargo,	Tollage.
* 0.27		No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy Jute Firewood Other articles		345 242 136 1,155	70,750 86,095 74,475 2,17,505	862 1,634 989 3,718	317 194 158 786	60,765 98,350 67,825 1,35,550	953 1,686 1, 74 1,982
	Total	 1,878	5,02,825	7,203	1,455	3,57,490	6,645

# Bengal Central Railway.

Abstract of principal commodities carried over the Bengal Central Railway during the month of July 1890, as compared with the same month of the previous year.

		4	180	00.	188	19.	Tot	al.	T	Desir
STAPLES.			Up.	Down.	Up.	Down.	1890.	1889.	Increase.	Decrea
				170.5	3/5 IPe	5 97	P. LUE			
			Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Ton
		3	- 6	130 829	1 400		1,216	1,493		
Doal	***	***	858	5	1,493	13	5	13	ereby .	20500
lotton, raw	***	***	******				CHURCH SO	2000年		1000
1.—European			7	100			The state of			K SECTION
2.—Indian	***		1 " "	1000	- W.		T 17 (C. 19)			A LONG
otton piece-goods-		CH T	1	The second second		-				750 al.
1European-	na'	-	271		232	1	271	233	38	
a.—In bales and bundi b.—In boxes	108 ***	***	1	A A THE			YEST PERMIT		ALC: N	100000
eIndian			1127	100		The state of	Commence of		1150	Nobel
aIn bales and bund	les	***	0-1							100000
b.—In boxes	115 915	•••		1.	W - L	1			trade in the	1000
7ains- 2.—Rice			16	F 50	110	53	64	163	*****	1000
5.—Others			44	15	50	834	59	884		5000
lides and skins -		100		CHANGE OF STREET		No. of the last	Lover		THE REAL PROPERTY.	11.53
1.—Hides of cattle—		1.0		7.	March Hait				STATE OF STREET	1
b.—Undressed	*** ***	***	12000		12.00		(Trans)	NAME OF THE OWNER.		0.0000
2.—Skins of sheep, &c	***		}	28	heren	28	23	28	*****	
a.—Dressed	*** ****	444			A. Yellow	200 - 200			12000	Take 1
b.—Undressed	*** ***		)	in the	all Listers	THE PARTY OF THE P			The state of	177
uto-		945		50 S			XEXE E		100	Last No.
1.—Raw— b.—Unscrewed		- 10		47		808	47	808	*****	
2.—Gunny-bage and cloth		- :::	3	1	9	10		19		2376.15
fotals-			100	7	7				A CHARLES	1000
1.—Copper, unwrought	*** ***	100		128 NEWS	HEAT MANAGES	304,7722504	- X			N.S. WE
2 Brass, unwrought	ht	***				19	87	97		- CON
4.—Brass and copper, wrong	no	1.5	80	7	78	A DESCRIPTION OF THE PARTY OF T	0,		Charles No.	PRODUCTION OF
6.—Tin	***	100	9 (0.2) e 1155	Marie Constitution	DECEMBER			79.75		1022
6Others	*** ***	***	1	STATE OF THE PARTY					Mark Street	1000
tile—	Euro	15,100	146	100000	130		146	130	16	
2.—Kerosine	***	***	182		115	*****	182	115	67	*****
SOthers	***	***							LONG COMM	1200
1Linseed		***	1	64.80018		1	STATE		2 5 TO (C 025)	
3.—Rape and mustard	***	***		Shirt San						N. Park
3.—Til or gingelly	*** ***	***	152	518	59	396	465	455	10	
5.—Castor	*** ***	•••	1	SP N					100	#≧ami
6.—Poppy		22		1		Developed to	THE PARTY OF	1		100
7Others			1 7 3						CONT.	1
rovisions-		-2117		638	1	152	638	153	485	
3.—Betel-nute		***	34	12	24	68	46	92	******	1 5 6
ailway plant and rolling-stock				- L.	68	138	115	206	120	1 100
alt m			426	- m. m.	306	*****	426	306		
HEAT—		(1)	ZALEZ		THE PERSON	100 P 150h	THE PARTY OF	10	A STATE OF THE PARTY OF THE PAR	1
1.—Drained	*** ***	***	30	153	10	369	192	379	******	15000
2.—Undesined	*** ***	***	30	38	46	60	68	96	*****	15-201
Il other articles of merchandise	-			ACTION TO BE		DI SCHOOL STATE		THE RESERVE	The state of the state of	1 300 8
1Uomanufactured			1,777	463	702	* 310	2,240	1,012	1,228	nerth.
2.—Manufactured		100	1		SPERMIN	5-5		HANGE SEE	PROPERTY.	-
	Total	013	4,056	1,765	3,433	3,240	6,294	6,682	1,964	1.3
		***								

Comparative Statement of the principal commodities carried over the Bengal Central Railway during the month of July 1890.

	D	ECREASES.	A Page				Tons.
Coal			***				277
Sufficiency of stock for railway and flotilla purp Unscrewed jute				Section 1			761
Sugar			cclusively i	n despatche	s from Khoo	olna.	187
Due to the successful competition of raw sugar	from Ja	va.					
	1	NORBASES.					
Betel-nuts From the Bengal Central Flotilla station exclus	ively.		** ;		N		485

CALCUTTA, the 24th September 1890.

F. P. QUINLAN,

Joint Auditor and Examiner of Accounts.

# Nalhati State Railway.

Statement showing Increases and Decreases in tonnage of Staples carried over the Nalhati State Railway during the month of July 1890, as compared with the same month of the previous year.

			188	19.	189	0.	Tot	al.	Y	
STAPLES.			Up.	Down.	Up.	Down.	1889.	1890.	Increase,	Decrease
			Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons,
		463	907		1,494	130 119	907	1,424	517	176
cal	***	***	4	******	5	******	4	5	i	
Cotton piece-goods-		***					1			200000
1.—European	***		23		19	******	23	19	******	1
Frains-	- Pani	diam'r.	5.65000				and the same	***		A TOTAL OF
3.—Rice	1/444	***	29	23	153	13	52 22	166 107	114 85	******
4Others	***	***	n	11	107	*****	22	107	99	******
Hides and skins—		8 5.0		The state of		1000			Mo ne	
1.—Hides of cattle— a.—Dressed		A112 SA		1		3	1	8	2	******
ute-	***	***				7000				1000
2.—Gunny-bags and clot	hs	***	2	1	2	8	3	10	7	*****
40-		160		Section Section	300	1910		1000	5.63	
1Stick	***	" me	2	******	19110	1	2	1	*****	1
fetals—		10152		10 C. C. C. C.			V355	6	6	Total September
2.—Iron	COMM.	***	10111	2	6 3	*******	3	10	7	· · · · · ·
4.—Others	***	***	1	FER THE SAID		1111111			1 15 December 1	
Dila-		55.633	1	*****	2		1	2	1	******
1.—Castor 2.—Kerosine		3600	3	******	3		.3	3		******
3.—Others	1	111	2		1		2	1	******	THE SHEET
Dilseeds-	10000	distrib	USUBALIAN A				N. Carrie			
2Mustard and rape	m		31	*****	54	*****	31	54	23	******
Provisions-		200		Tall Walled For			-			10-10-47:22
1,-Ghee	-01	***	1		1	204	36	109	73	*****
3Others	914	144		32	5 4	104	3	109	1	******
Paper and pasteboard Railway plant and rolling-stock		110	3 9	14	58	· · · · · · · · · · · · · · · · · · ·	28	62	39	*****
Kailway plant and rolling-stock	***	200	72	30	64		72	64	******	Section 1
Salt	100				A 48 1 10 10 10 10 10 10 10 10 10 10 10 10 1	STATE OF THE PARTY		110	0.510	W. W. C.
2.—Indian		1		8	7	23	8	30	22	111111
Silk piece-goods—		91000			- Hallax III	OPPOSED / E			1.15.10Px256	
2.—Indian		***		5	To seem of	11000	5	******	111111	
stone and lime	200	***	9		3	1	9	1	*****	
sugar—	12 10	ABOUT	90	0.1.8.1.	1		28	n	AND THE	17
1.—Drained		1 444	28		31	******	3	31	28	
2Undrained		***	24	*****	16	5	24	21		
Pobacco	32111.10900		7		16		7	16	9	
All other articles of merchandise			67	29	44	6	96	50	******	46
		100						1000000	-	-
	Total		1,243	126	2,039	175	1,369	2,214	935	0

			INCREA	SH.				Tons.
								517
Due to increased demand.								
Grains								144
(2) Rice				***	***	***	***	144
This is due to greater expo	rt from in	itermediat	e stations.					85
	***		Jan. 250	***	Sales Coll	100000	N. S. C.	00
Due to import of paddy for	greater of	demand.						
Oil-seeds-								23
(2) Mustard and rape	***	***		***		***		
Due to greater demand.								

								Tons.
Provisions— (3) Others						***		73
Due to greater export o Railway plant and ro	lling-stock			y jack Ir	nits.			39
Due to greater despatch Silk, raw-	es of railw	ay materials						
(2) Indian Due to greater despatch	of sills to	Europe this	voor	***	in the second		and the said	22
Sugar-	Of Silk to	Europe ems	Jear.					28
(2) Undrained Due to sudden demand.	***	***						28
			DECREASE.		Telephone St.			
Sugar— (1) Drained Due to despatches from	Calcutta t	y steamer.	100 m					17

R. G. MOOKERJEE,

Manager, Nalhat: State Railway.

# Weekly Return of Traffic Receipts on Indian Railways.

#### EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 27th September 1890, on 1,5251 miles open.

	COACHIN	G TRAFFIC.		FRIC.		Total earnings.	1 1000	TEAIN-MILI	RS RUN.
	Number of passengers,	Receipts.	Weight carried.	Receipts.	(estimated).	Total earnings.	Coaching.	Merchan- dise.	Total.
		Rs. A. P.	MDs. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.		WE IS	
Total traffic for the week Or per wile of railway	*228,649	*2,40,949 11 0 157 7 10	19,53,614 10	4,49,818 6 0 , 294 13 10	16,614 14 1 10 14 3	7,06,682 15 1 463 3 11	61,866	80,4481	142,314
Por previous 12 weeks of half-	2,616,364	26,15,259 12 0	2,18,53,282 10	48,77,479 0 6	1,92,296 1 9	76,85,034 14 3	757,091	891,766)	1,648,857
Total for 13 weeks	2,845,013	28,55,509 7 0	2,38,06,896 20	58,27,297 6 6	2,08,010 15 10	83,91,717 13 4	818,957	972,214	1,791,171
COMPARISON.									
Total for corresponding week of previous year	247,883}	2,70,802 5 10	22,57,002 30	4,63,908 12 0	16,328 5 10	7,51,129 7 8	65,838	78,928	144,700
ing week of previous year Total to corresponding date of	*****	177 9 2		304 1 8	10 11 3	492 6 1	*****	******	
previous year	3,105,298	30,93,260 13 1	2,76,75,074 30	57,63,234 12 5	2,15,280 9 6	90,71,776 3 0	848,528	1,053,584	1,905,115

<sup>\*</sup> The decrease in coaching traffic is due to figures for the corresponding period of 1889 having included receipts for pilgrim traffic from Gya on account of "Aupar Pucksha."

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works
Department Circular No. XXI, Railway, dated 23rd July 1883.

RWCHIP 28TH	ROMIPTS FOR WERK ENDING 28TH SEPTEMBER 1889. 27TH SEPTEMBER 1890					AP	RECEIPTS PRO RIL 1889 TO 28 EPTEMBER 1889	TH	AP	RECEIPTS PRO RIL 1890 TO 271 SEPTEMBER 1890	Total	Total	
Mean mileage worked.	Receipts.			Receipts.		Mean mileage worked.			Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in 1890.	decrease 1890.
1,525}	Rs. 7,51,129	Rs. 492	1,525}	Ra. 7,06,683	Rs. 463	1,5254	Rs. 2,10,98,527	Ra. 532	1,525}	Rs. 1,95,10,648	Rs. 492	Rs	Ra. 15,87,8

#### PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 27th September 1890, on 571 miles open.

	COACHING	TRAPPIC.	MERCHANDISE A	TO	Other earnings	Total assume	TRAFFIC TRAIN-MILES RUN.			
1 14 14 14 14 14 14 14 14 14 14 14 14 14	Number of passengers.	Receipts.	Weight carried.	Receipts.	(estimated).	Total earnings.	Coaching.	Merchan- dise.	Total.	
		Rs. A. P.	MDs. s.	Rs. A. P.	Rs. A. P.	Ra, A. P.	rest in a			
al traffic for the week per mile of railway previous 12 weeks of half-mar	*12,356 216	*6,351 8 0 111 0 8	31,017 30 542 20	2,303 13 0 40 4 5	32 5 0 0 9 0	8,697 10 0 151 14 1	1,372	452	1,824	
previous 12 weeks of their	113,660	57,682 6 0	3,77,586 20	23,670 8 0	505 12 0	81,858 10 0	12,021	6,815	18,836	
Total for 13 weeks	126,016	64,033 14 0	4,08,554 10	25,974 5 0	538 1 0	90,546 4 0	18,398	7,267	20,660	
COMPABISON.	Cumhet E				10.00					
al for corresponding week	21,000	13,605 1 8	23,485 20	2,108 9 0	38 13 0	15,752 7 8	2,081	427	2,508	
mile of railway correspond- or week of previous year	DO0's	287 18 7	410 30	36 13 10	0 10 10	275 6 3				
is to corresponding date of	186,426	1,04,746 11 10	6,17,517 80	29,582 11 0	558 2 3	1,34,987 9 1	17,677	8,932	26,600	

<sup>•</sup> The decrease in coaching traffic is due to figures for the corresponding period of 1889 having included receipts for pilgrim traffic from Gya on account of

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works

Department Circular No. XXI, Railway, dated 23rd July 1883.

CRIP!	SEPTEMBER	ENDING 1889.		rs for werk (September		Al	RECEIPTS PROPRIE 1889 TO 287 EPTEMBER 1889.	H	A	RECEIPTS FRO PRIL 1890 TO 27 SEPTEMBER 189	TH	Total	Total	
nan mge ised.	Receipts.	Per mile worked,	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worken.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in 1890.	decrease it	
71	Re. 15,752	Rs. 275	574	Rs. 8,688	Rs. 152	571	Rs. 2,48,883	Rs. 167	571	Rs. 2,17,291	Rs. 146	Rs.	Rs., 31,592	

# TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 27th September 1890, on 224 miles open.

1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	COACHING	TRAPPIC.	MERCHANDISE TRAFF		Other earnings	Total	TRAFFIC	TRAIN-MIL	ES RUN.
	Number of passengers.	Receipts.	Weight carried.	Receipts.	(estimated).	earnings.	Coaching.	Merchan- dise,	Total.
	\$1	Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
traffic for the week	14,621	3,662 13 0 164 9 13	5,645 30	207 14 6 9 5 6	4 2 0 0 3 0	3,874 13 0 174 2 5	922	46	968
mile of railway evious 12 weeks of half-	202,721	49,659 11 0	54,455 20	2,348 7 0	71 8 0	52,079 10 0	10,772	558	11,330
Total for 13 weeks	217,342	55,822 8 0	60,101 10	2,556 5 0	75 10 0	55,954 7 0	11,694	604	12,298
for corresponding week of vious year ille of railway correspond-	17,758	4,491 6 6	9,875 0	336 8 0	10 2 0	4,838 0 6	904	64	968
week of previous year to corresponding date of wous year	296,785	201 13 9 54,062 15 10	74,488 20	15 9 0 2,479 10 0	0 7 3 61 5 3	217 7 0 56,603 15 1	12,015	625	12,640

Approximate Statement of gross receipts of the Tarkessur Branch Railway, prepared in accordance with Public Works

Department Circular No. XXI, Railway, dated 23rd July 1883.

Part I	SEPTEMBER	ENDING. 1889.	RECEIPT 27TH	SEPTEMBER	ENDING 1890.	A	RECEIPTS FROM PRIL 1889 TO 28 EFTEMBER 1889	TH	A	RECEIPTS PROPRIE 1890 TO 27 SEPTEMBER 1890	TH	Total	Total
	Receipts.		Mean mileage worked.	Receipts.		Mean mileage worked.	Total receipts.		Mean mileage worked.	Total receipts.	Per mile worked p-r week.	increase m 1890.	decrease in 1890.
ł	Re.	Rs.		Ra.	Rs.		Rs.	Rs.		Rs.	Rs.	Ro.	Rs.
	4,838	217	221	3,875	174	221	1,39,941	241	- no7	1,40,802	243	1,561	

# EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K. and D., and Assam-Behar Sections.)

Approximate Return of Traffic for week ended 20th September 1890, on 763 miles open.

	COACHIN	G TRAFF	IC.		MERCHAN		BAND MIN	NEI	LAL	Other es			Tot	nl		TRAFFIC	TRAIN-MILI	es ru
	Number of passengers.	Coach		K	Weight carried.		Recei	pts		steam-			earni	ngs.		Coaching,	Merchan- dise.	Tot
		Rs.	۸.	P.	MDS,	8.	Rs.	٨.	P.	Rs.	A.	P.	Rs.	۸.	P.			
Total traffic for the week Or per mile of railway For previous 11 weeks of half-	120,250 158	55,020 72	0	0	6,02,340 789	0	1,84,890 242	0	0	12,230	0	0	2,52,140 816	0	0	21,998	27,685	40)
year	1,531,180	6,01,528	0	0	58,10,650	0	14,03,813	0	0	1,49,990	0	0	*21,55,331	0	0	243,740	354,133	891)
Total for 12 weeks COMPARISON.	1,651,430	6,56,548	0	0	64,12,990	0	15,88,703	0	0	1,62,220	0	0	23,07,471	0	0	265,738	881,768	647,
fotal for corresponding week of previous year	124,749	59,214 79		0	<b>6,68,398</b> 892	131	1,78,175			14,952	0		2,52,341		107	22,452	36,234	11/1
Potal to corresponding date of previous year	1,633,273	6,76,224			72,77,049		17,08,708			1,70,367		0	25,55,299			268,576	361,443	630

<sup>\*</sup> Audited up to week ending 9th August 1890. † Excluding steamer earnings.

#### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

	rs por week September		RECEIPT 20TH	S FOR WEEK SEPTEMBER 1	ENDING 1890.	Δ	L RECEIPTS PRO PRIL 1889 TO 21 SEPTEMBER 1889	ST	APRIL 1890 TO 20TH SEPTEMBER 1890. Total				Tes
Mean mileage worked.	Receipts.		Mean mileage worked.	Receipts.		Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage.	Total receipts.	Per mile worked per week.	increase in 1890.	decreas 1898,
747	Rs. 2,52,341	Rs. 338	763	Rs. 2,52,140	Rs.	708	Rs. 46,90,741	Rs. 265	758	Rs.	Ra. 253	Rs. 99,388	Rs.

<sup>\*</sup> Audited up to week ending 9th August 1890.

# BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 20th September 1890, on 125 miles open.

	COACHING	7 TRAPPI	c.		MERCHANI	TRA	AND MIN	RE	AL							TRAFFIC	TRAIN-MII	286
	Number of passengers.	Conchi			Weight carried.	1	Receip	to,		Other en	ted	ngs ).	Tota			Coaching.	Merchan-	No.
		Rs.	A. 1	Р.	M Ds.	8.	Rs.	A.	р.	Rs.	A.	P.	Rs.	Α.	P.			1
Total traffic for the week Or per mile of railway For previous 11 weeks of half-	18,910 151	5,760 46	0		13,940 113		630 5			40		0	6,430		0	8,610	2,060	1
7887	283,112	85,739	0	0	8,86,040	0	28,423	0	0	2,853	0	0	*1,16,514	0	0	38,690	22,084	1
Total for 12 weeks	302,022	91,490	0	0	3,99,980	0	29,052	0	0	2,393	0	0	1,22,944	0	0	42,300	24,144	
COMPARISON.				1	113	6												
Total for corresponding week of previous year	24,737	9,174	0	0	1,09,549	0	11,066	0	0	686	0	0	20,926	0	0	3,587	2,017	The state of
ing period of previous year Total to corresponding date of	198	73	0	0	876	0	89	0	0	5	0	0	1.67	0	0	Senior di la		H
previous year	325,526	1,04,917	0	0	7,38,121	0	68,371	0	0	2,432	0	0	1,75,720	0	0	41,849	29,483	

<sup>\*</sup> Audited up to week ending 9th August 1890.

#### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPT 21ST	RECEIPTS FOR WEEK ENDING RECEIPTS FOR WEEK ENDIN 20TH SEPTEMBER 1890.				anding 1890.	APRIL 1	L RECEIPTS FRO 889 TO 21st SEP 1889.	OM 1ST TEMBER	APRIL 1	L RECEIPTS PRO 1890 TO 20TH SEP 1890.	M 1st TEMBER	Total
Mean mileage worked	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean milenge worked.	Total receipts.	Per mile worked per week.	increase in 1890.
125	Rs. 20,926	Rs. 167	125	Ra. 6,430	Rs. 51	125	Ra. 3,55,567	Rs.	125	Rs. *2,88,452	Ra.	Rs.

<sup>\*</sup> Audited up to week ending 9th August 1890.

# DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 20th September 1890, on 86 miles open.

	COACHING	TRAFFIC.	MERCHANDISE A	ND MINERAL	Other earnings	Total	TRAFFIC	TRAIN-MILE	s nun.
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.	(estimated).	earnings.	Coaching.	Merchan- dise.	Total.
	1,000	Rs. A. P.	Mps. s.	Rs, A. P.	Rs. A. P.	Rs. A. P.		75.77	
al traffic for the week	18,730 160	4,320 0 0 50 0 0	14,930 0 174 0	1,860 0 0 16 0 0		5,850 0 0 68 0 0	2,414	690	3,10
previous 11 weeks of half-	157,280	50,079 0 0	1,34,850 0	11,857 0 0	3,556 0 0	*65,492 0 0	25,898	7,802	38,20
Total for 12 weeks COMPARISON.	171,010	54,399 0 0	1,49,780 0	18,217 0 0	3,726 0 0	71,342 0 0	28,312	8,082	36,39
al for corresponding week of	19,002	4,784 0 0	19,534 0	2,009 0 0	147 0 0	6,940 0 0	2,547	1,004	3,55
mie of railway corresponding rid of previous year	167	56 0 0	227 0	23 0 0	2 0 0	81 0 0			
al to corresponding date of	176,462	55,895 0 0	1,99,349 0	14,695 0 0	2,629 0 0	71,219 0 0	29,804	10,761	40,56

<sup>\*</sup> Audited up to week ending 9th August 1850.

# FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

CHIPT	S FOR WEEK I	POB WEEK ENDING RECEIPTS FOR WEEK ENDIN 20TH SEPTEMBER 1890.					RECEIPTS FRO PRIL 1889 TO 21 EPTEMBER 1889	ST	1 1	APRIL 1890 TO 20 SEPTEMBER 1890	TH	Total increase in	Total decrease in	
ean inge ked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in 1890.	1890.	
	Re.	Rs.		Ra.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Ps.	
м	6,940	81	86	5,850	68	86	1,45,498	68	86	*1,53,203	71	7,705		

<sup>\*</sup> Audited up to week ending 9th August 1890.

# NALHATI STATE RAILWAY.

Approximate Return of Traffic for week ended 20th September 1890, on 271 miles open.

		Continues a		The second second	and the second second			-	
	COACHING	TRAFFIC.	MERCHANDISE A	ND MINERAL	Other earnings	Total	TRAFFIC	TRAIN-MILE	S RUN.
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.	(estimated).	earnings.	Coaching.	Merchan- dise.	Total.
		Rs. A. P.	MDS. S.	Rs. a. P.	Rs. A. P.	Rs. A. P.			
al traffic for the week	2,480 91	860 0 0 82 0 0	3,870 0 142 0	240 0 0 9 0 0	10 0 0	1,110 0 0 41 0 0	580	. 170	759
previous 11 weeks of half-	33,340	11,528 0 0	88,540 0	4,579 0 0	176 0 0	*16,283 0 0	6,098	2,993	9,091
Total for 12 weeks	35,820	12,388 0 0	90,410 0	4,819 0 0	186 0 0	17,393 0 0	6,678	3,163	9,841
al for corresponding week	2,865	987 0 0	11,437 0	770 0 0	20 0 0	1,777 0 0	586	449	1,035
me period of previous year	105	36 0 0	420 D	28 0 0	1 0 0	65 0 0		*****	*****
al to corresponding date of revious year	35,502	12,928 0 0	1,16,875 0	7,005 0 0	595 0 0	21,218 0 0	6,882	4,452	11,384

<sup>\*</sup> Audited up to week ending 9th August 1890.

# FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

CRIP Tina	CRIPTS FOR WHER ENDING RECEIPTS FOR WERE ENDING 20TH SEPTEMBER 1830.				ENDING 1890.	TOTAL RECEIPTS FROM IS APRIL 1889 TO 218T SEFTEMBER 1889.			Δ	RECEIPTS PRO PRIL 1890 TO 20 SEPTÉMBER 189	TH	Total increase in	Total decrease in
ean inge iked.	Receipts.		Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked,	Total receipts.	Per mile worked per week.	1890.	1890,
m	Rs. 1,777	Rs.	271	Rs. 1,310	Rs.	274	Ra. 46,797	Rs.	27 t	Ra. *43,405	Rs. 64	Re. 	Rs. 3,392

<sup>\*</sup> Audited up to week ending 9th August 1890.

#### BENGAL AND NORTH-WESTERN AND TIRHOOT RAILWAYS.

COMBINED SYSTEM.

Approximate Return of Traffic for week ended 20th September 1890, on 691 miles open.

	COACHING	TRAPPIC.		AND MINERAL FFIC.	Other earnings (estimated),	Total	TRAPPIC	TRAIN-MI	LBII R
	Number of passengers.	· Coaching receipts.	Weight carried.	Receipts.	including stenm-bont, earnings.	earnings.	Coaching.	Merchan- dise.	Te
Fotal traffic for the week (on 691		Rs.	MD8.	Rs.	Rs.	Rs.	Page 1		-
miles open) Or per mile of railway For previous 10 weeks of half-	66,182 95.78	25,900 37:48	2,58,204 873°67	29.520 42.72	6,540 9'47	61,960 89'67	11,895	11,442	21,
year	784,438	3,00,459	27,40,970	3,17,640	68,927	6,87,026	127,988	120,745	248
Total for 11 weeks	(a)850,620	3,26,859	(8) 29,99,174	3,47,160	*75,467	7,48,986	139,883	132,187	879
COMPANISON.  Audited figures.  Fotal for corresponding week of previous year  Per mile of corresponding week	78,100	28,627	2,06,309	17,494	8,770	54,891	10,600	10,308	20
of previous year on 649 miles open	120.35	. 44'11	317:89	26.96	13'51	84'58			18
previous year	914,304	3,16,792	35,55,022	3,94,870	98,849	810,511	125,528	160,180	283

\* Steam-boat earnings for the week, Rs. 4,800. Ditto to date, , 56,340.

# FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal and North-Western and Tirhoot Ruilways.

	TS FOR WEEK		RECEIP:	rs for Week September	ENDING 1889.	AY	PRIL 1890 TO 20 EPTEMBER 1890	TH		APRIL 1889 TO SEPTEMBER I		Total	Total
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.		Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in 1890-91,	1590-91.
	Rs.	Rs.		Re.	Ra.		Rs.	Rs.	Carried States	Rs.	Rs.	Rs.	Re.
691	61,960	89:67	649	54,891	84.28	669	20,72,666	125*36	649	21,26,164	131.80		53,406

(a) Excludes \$1,500 passengers, being traffic common to B, and N.-W, and T. Railways, (b) Do. 1,36,594 maunds, ditto ditto

DARJEELING	3-HIMAL	AYAN I	RAILWAY	COMPA	NY, LIM	ITED.	Rs.
Approximate earnin	gs for weel	k ending	30th Augu	st 1890		of Author	7,21
Corresponding perio	d of 1889			ere			17,07
Decrease					AH HER		9,852
	TAKE THE			The second	V	2012/12/25	Rs. A. P.
Receipts per mile fo	r week end	ling 30th	August 18	90		(F-12)	141 8 6
Corresponding perio	d of 1889			***	***		334 13
Decrease	38.5		the second	Sales of S			193 4
Receipts from 1st J	uly to 30tl	h August	1890	750			65,578
Corresponding perio				0.00	7 210	The Late	89,36
Decrease							23,780
Decrease			)	4		orrell in a	23,760
DARJEELIN Approximate earnis Corresponding per	ngs for wee	AYAN I	RAILWA	Y COMPA	14 x 14	ornal lice	Rs. 9,934
DARJEELIN Approximate earnis	ngs for wee	AYAN I	RAILWA:	Y COMPA	NY, LIM  	ITED.	9,934
DARJEELIN Approximate earnin Corresponding per	ngs for wee iod of 1889 	AYAN I	RAILWA! 6th Septen	Y COMPA	NY, LIM 	ITED.	Rs. 9,934 16,067
DARJEELIN Approximate earnic Corresponding per Decrease Receipts per mile f	ngs for wee iod of 1889 	AYAN I	RAILWA! 6th Septen	Y COMPA nber 1890 	NY, LIM  	  	Rs. 9,934 16,067 6,133 Rs. A. P. 194 12 7
DARJEELIN Approximate earnic Corresponding per Decrease Receipts per mile f Corresponding peri Decrease	ngs for week on the control of 1889	AYAN I	RAILWAY 6th Septem September	Y COMPA aber 1890   1890	NY, LIM	ITED,	Rs. 9,934 16,067 6,133 Rs. A. P. 194 12 7 315 0 8
DARJEELIN Approximate earnin Corresponding per Decrease Receipts per mile f Corresponding peri	or week en od of 1889	AYAN I	RAILWAY 6th Septem September	Y COMPA aber 1890   1890	ny, lim   	ITED. 	Rs. 9,934 16,067 6,133 Rs. A. P. 194 12 7 315 0 8



# The Calcutta Gazette.

WEDNESDAY, OCTOBER 15, 1890.

# OFFICIAL PAPERS.

Non-Subscribers to the GAZETTE may receive the Supplement separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.

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RESOLUTION ON THE TRIENNIAL REPORT ON THE WORKING OF CHARITABLE DISPENSARIES UNDER THE GOVERNMENT OF BENGAL FOR THE YEARS 1887, 1888 AND 1889.

MEDICAL.

Dated Darjiling, the 6th October 1890.

READ-

The Triennial Report on the working of Charitable Dispensaries under the Government of Bengal for the years 1887, 1888 and 1889.

Read also—

The Annual Report for 1886 and the Resolution recorded thereon.

Dr. Hilson's triennial report on the working of the charitable dispensaries under the Government of Bengal is a satisfactory document, which records much progress in the popularity and usefulness of these institutions throughout the province, and reflects much credit on the Inspector-General himself, to whose administrative energy and perseverance a large proportion of this encouraging result is due.

The post of Inspector-General of Civil Hospitals was held, during the past three years, by Dr. A. J. Cowie, from January 1887 to April 1888, and again from November 1888 to April 1889, and by Dr. A. H. Hilson in the intervening months, and from May 1889 to the end of the year. Dr. Hilson has brought to bear upon his work a large experience of other provinces, which has been of great service to him in reorganizing the medical institutions of Bengal, and his present report, which is full of interest and yet not too long shows that, while much has been done to improve the facilities for the introduction of medical skill and science in the mofussil, much yet remains to be done before this province, which is in many respects one of the most unhealthy in India, can rival the more northern provinces in the management and efficiency of its charitable dispensaries.

2. The total number of dispensaries in Bengal has increased from 234 in 1886 to 261 in 1889; of this last number 125 are in class II and are under the management of local bodies, and the Inspector-General brings to notice the fact that there are several other institutions which might well be made over to the management of local Municipalities or District Boards. The Lieutenant-Governor is prepared to consider any recommendations which

Dr. Hilson may wish to make in specific instances.

3. The interest taken by Municipalities and District Boards in the charitable medical institutions placed in their charge is favourably noticed by the Inspector-General, who at the same time comments on the indifference shown by many local Committees in the control of their dispensaries. His Honour is of opinion that the individuality of the medical officers attached to the various dispensaries has much to do with this, but would at the same time impress on the Chairmen and members of local bodies the importance of supervision and encouragement in the case of institutions of such practical usefulness as these, and would remind them that the remarks recorded by unofficial visitors in the inspection-books provided for the purpose are often of the greatest service to the authorities in remedying defects and detecting abuses. Sir Steuart Bayley regrets to notice that although there was an improvement in the figures of the number of inspections made by Civil Surgeons, there are still a large number of dispensaries which are only visited once instead of twice in the year.

4. The figures of attendance, both out-door and in-door, have steadily

increased in the past three years, as is shown in the following table:-

		la de	Switchen.	2017-162	Di	VISIONS.	med) is	of telest	на јушава	di se	1-04
	Yrar.	Burdwan,	Presidency.	Rajshahye.	Orissa.	Dates.	Chittsgong.	Patna,	Bhagulpur.	Chota Nagpur.	GRAND TOTAL.
887 888 889		3,528 149,217 3,590 143,372 3,920 152,813	2,581 138,288 2,812 142,382 2,970 159,873	2,422 136,703 2,494 154,346 2,858 155,270	1,938 62,680 1,950 65,242 2,770 74,766	3,791 106,327 3,745 65,242 4,135 113,333	625 31,059 781 33,918 851 35,193	6,630 316,513 6,842 34,082 7,688 364,544	1,996 86,214 2,435 91,631 2,648 94,361	968 28,464 1,102 27,899 1,141 30,190	24,47 1,055,46 25,75 1,106,70 2*,98 1,179,84

The proportion of persons treated, both indoors and out of doors, to population is very low, and it is only in a few exceptional areas that it touches 3 per cent., the total for the province being in 1889 1,208,824 persons treated out of a population of 69,536,861, or 1.73 per cent. But, on the other hand, it may be added that the returns from dispensaries are becoming more accurate year by year, and the steady increase in numbers, in spite of the elimination of many fictitious returns of large attendance, is clearly a matter for congratulation.

5. On the subject of in-door patients, Dr. Hilson remarks:-

"The native of India, when sick, prefers to be treated at his own house, and at such a time will not leave his family if it can possibly be avoided—a characteristic which seems to be more strongly marked in Bengal than elsewhere. The desire is only natural, and he cannot be blamed for it; but it seems to me that one cause of it is to be found in the very limited provision of separate accommodation for the families of patients at dispensaries, and this is a point well worth the attention of Municipal Committees and others interested in these institutions. In the Punjab and North-Western Provinces many of the dispensaries have a few rooms apart from the main building, which are reserved for the accommodation of well-to-do patients and those who bring relatives with them, and they are largely taken advantage of."

Sir Steuart Bayley would be glad to see the above proposal carried out, as he has no doubt that the defect pointed out by the Inspector-General is a serious one. Dr. Hilson records many valuable remarks on the subject of various dispensaries at which the mortality among in-door patients was high, and it is worthy of notice that it is at the various shrines to which pilgrims resort that the mortality is found to be highest, the fatigue and poverty of the pilgrims rendering them an easy prey to attacks of cholera and dysentery. The mortality among in-door patients was 12.71 per cent. in 1887, 12.77 per cent. in 1888, and 13.9 per cent. in 1889.

6. The increase in the number of out-door patients is very satisfactory, and speaks well for the improved management and popularity of the charitable dispensaries in the mofussil. The Lieutenant-Governor has no doubt that, as remarked by Dr. Hilson, the professional qualifications of the officer in charge

of a dispensary greatly affect its popularity, and local Municipalities and others who have the management of these institutions would do well to bear in mind his warning that an excellent building and a full stock of medicines and medical comforts will not be of much service if the officer in charge is not a skilled

practitioner, who is earnest and devoted to his work.

7. Very few cases of small-pox are treated in dispensaries, although the disease continues to be prevalent in several districts. Cholera is dealt with in almost all such institutions, but they are not sufficiently large or adequately equipped to deal with anything approaching to an epidemic of this disease. The number of cases of malarial fever increased from 202,933 in 1887 to 232,582 in 1889, and in the latter year formed a percentage of 19.24 of the total number of cases treated. This disease is most prevalent in the Burdwan, Presidency and Rajshahye Divisions. The proportion of cases of malarial fever in the Presidency Division has increased from 26.68 per cent. in 1887 to 30.28 per cent. in 1889. On this subject Dr. Hilson remarks—

"Malarial fevers are not more common in Bengal than in other Indian provinces, but they have this peculiarity that they are usually of a more severe and fatal type, which is probably due to the damp, relaxing nature of the climate. They leave their traces behind in the form of anemia, enlarged spleen, diarrhoea, and dysentery, and it has truly been said that if the prevalence of malarial fever could be abolished one-half the diseases of the country would disappear with them."

The Inspector-General shows that very few lepers resort to charitable dispensaries for relief, the average number treated in these institutions in the past three years being only 2,525. His general remarks on the nature of the disease and its contagious and non-contagious properties are of great value as showing how much remains to be done before it can be asserted with any confidence that the disease is understood, or that it can be effectively dealt with by

segregation even of the strictest kind.

8. The increase in the number of surgical operations is very satisfactory, and the Lieutenant-Governor agrees with Dr. Hilson in thinking that successful operative surgery is greatly appreciated by the poorer classes, and that the performance of major operations by qualified Assistant Surgeons adds much to the popularity of mofussil dispensaries. The very large attendance at the Chupra and Monghyr dispensaries, where the Assistant Surgeons, the late Babu Aghore Nath Bose and Babu Upendro Nath Sen, especially distinguished themselves by their success in surgical work, tends to support this view, and His Honour hopes that every encouragement will be given to such medical subordinates as may show good results in the exercise of this branch of their profession. These remarks more especially apply to cases of cataract, and there can be no doubt that success in restoring failing sight has great influence on the popular mind.

9. The following statement, which shows at a glance the financial position of the charitable medical institutions of Bengal for the past three years, is

reproduced in extenso from the Inspector-General's report:

<b>元码,在企业的,由于对于公司</b>		In	com	в.		STEELS No. 150	ALLESSEE GERTAL	2014 S. 2014		
		18	87.	tulia.	1	888.		10' 10' 10' 10	289	10.00
	32752	Rs	A.	P.	Rs.	Α.	P.	Rs.		P.
Cash balance on 1st Januar	гу	25,753	7	1	33,536	5	7	38,783	13	1
From Government—		100				dia.			400	
As salaries	***	15,445	7	1	15,018	10	8	15,978	3	10
As registers and forms		1,794	10	8	2,156	1	0	2,066		
As European medicines		487	3	0.	702	12	6	573		
For diet of police cases		1,842		9	2,109	.3	8	2,338		î
Sale of medicines										Jest H
Special allowances		1,979	8	1	2,082	6	4	1,963	14	9
Total		21,548	13	7	22,069	2	2	22,920	15	7
From local or other funds		58,985	5		71,845	15	6	61,832	13	5
From municipal funds		1,47,681	1	6	1,53,582	14	6	1,61,843		
Interest on investments		29,215	6	7	31,958		2	36,750		
Sale of securities or withdra	aw-									
al of deposits		20,191	12	11	25,524	14	9	14,462	5	8
European subscriptions	***	14,667			13,529	4	3	17,115		
Native subscriptions		1,10,462	12	0	1,01,275	3	10	1,19,623		0
Total income		4,28,506	7	3	4,58,321	15	9	4,73,332	15	1
			-	-	-	-	-	-		-

	Expe	ndit	ure.						
	18	87.		18	88.		1	889.	
VI CONTRACTOR	THE RESERVE THE PARTY OF THE PA	-	P.	Rs.	A	P.	Rs.	A.	P.
On establishment .	2,15,873	4	5	2,28,490	7	5	2,37,905		1000
	9,711		2	10,001		4	10,452	7	10
" European medicines				ALL YOU					
whether from Govern	The state of the s								
ment store or purchase									
otherwise	10.000	14	4	47,787	13	6	55,368	12	11
" diet …	00 000		8	41,442		-	46,798		
	27,174	-	11	29,157			34,081		100
	36,091		2	38,718			38,136		0
- 13	. 22,027		6	18,796		1	14,352		4
invested during the year			_		_	-	-		
Total expenditure .	3,94,750	0	2	4,14,394	13	10	4,37,095	3	9
	-		_			-	^ <del></del>		-
Cash balance on 31st Decem	1-								
ber •	33,756	7	1	38,927	1	11	36,237	11	4
	10000				-	-	Armin Age		-

The variations in the figures shown as closing balance on 31st December and opening balance on 1st January are fully explained by Dr. Hilson, and are due to the correction of the accounts of various dispensaries at the close of the year. The figures are very satisfactory, and show that these medical charities are well and liberally supported and are in a flourishing financial position. The total amount of the subscriptions, both from Europeans and Natives, has largely increased, and municipal and local bodies deserve the Inspector-General's congratulations on the co-operation of the general public that these

figures disclose.

The increase in expenditure is inevitable in the face of the extension of medical aid to the poorer classes, and Dr. Hilson notices with regret that in many cases a laudable desire for economy has led to restriction of the pay of the officers employed to that of the lowest grade of Assistant Surgeons—a form of economy which is open to criticism. It is, however, not improbable that in some cases not more than this scale of pay can really be afforded, and that an effort is made in order to obtain the services of an officer of qualifications superior to those of a Hospital Assistant. The whole question of the appointment of officers to the control of dispensaries has lately been again brought under the consideration of Government, and it will be separately dealt with by the Lieutenant-Governor after consulting the Municipal Department and the Commissioners of Divisions; it is therefore unnecessary to make further comment on the remarks on this subject contained in the Inspector-General's present report.

10. The notes and statistical tables which are appended to the report are full of interesting detail and form a record of much good work. Sir Steuart Bayley agrees with the Inspector-General in his commendation of certain Assistant Surgeons who have shown exceptional ability in various branches of

their profession, and their names will be noted for future guidance.

Order.—Ordered that a copy of the Resolution, together with a copy of the Report, be submitted to the Government of India, Home Department, for information.

Ordered also that a copy of the Resolution be forwarded to the Inspector-General of Civil Hospitals, to the Municipal Department of this Government, and to all Commissioners of Divisions for information, and that the Resolution be published in the Calcutta Gazette.

By order of the Lieutenant-Governor of Bengal,

C. C. STEVENS,

Offg. Chief Secy. to the Govt. of Bengal.

# RESOLUTION ON THE REPORT OF THE ADMINISTRATION OF THE STAMP DEPARTMENT DURING THE THREE YEARS ENDING 31ST MARCH 1890.

#### FINANCIAL DEPARTMENT-STAMPS.

Darjeeling, the 7th October 1890.

RESOLUTION.

READ-

The Report of the Board of Revenue on the Administration of the Stamp Department during the three years ending 31st March 1890.

The present report is the first which has been submitted under the triennial system introduced by the orders of the Government of India, No. 4417 of 23rd August 1887, statistical information only with brief explanatory notes having been supplied in the two previous years. The Acts under which the stamp revenue was collected during the period under review were the Indian Stamp Act I of 1879 and the Court-fees Act VII of 1870 as modified by subsequent enactments. Under the orders of the Government of India, the copying fee has been reduced from four to three annas per folio from 1st April 1890. From 1st April 1888 the rate of discount on the sale of court-fee stamps of all values above one rupee has been reduced from 3 pies to 1½ pie per rupee. The other changes in the law and rules issued by Government are not of sufficient importance to call for special notice.

2. The financial results of the administration of the Stamp Department during the past four years, according to the returns furnished by the Accountant-General, are shown in

the following table:-

	STAMPS 1	UNDER ACT 1	от 1879.	COURT FRE	UNDER ACT	VII of 1870.		TOTAL.	
YEAR.	Receipts.	Refunds and other charges.	Net revenue.	Receipts.	Refunds and other charges.	Net revenue.	Receipts.	Charges.	Net revenue.
1884-87	Rs. 34,72,802 35,51,253 37,50,871 38,88,945	Ra, 1,89,298 2,55,242 2,76,042 2,88,689	Rs. 32,83,599 32,96,011 34,74,829 36,00,256	Ra. 99,89,759 1,02,64,782 1,00,88,114 1,03,48,824	Rs. 4,21,010 3,60,835 8,39,661 3,39,555	Rs. 95,68,749 99,03,947 97,48,453 1,00,09,269	Rs. 1,34,62,561 1,88,16,035 1,38,38,985 1,42,87,769	Rs. 6.10,303 6,16,077 6,15,703 6,28,244	Rs. 1,28,52,258 1,81,99,958 1,32,23,289 1,36,09,523
Average of 1887-88 to 1888-89	87,80,356	2,73,324	34,57,032	1,02,33,907	3,46,684	98,87,223	1,39,64,2/3	6,20,008	1,33,44,25

The gross average annual revenue collected under both the Acts during the three years under review was Rs. 1,39,64,263 against Rs. 1,34,62,561 in 1886-87. Both judicial and non-judicial stamps contributed to the increase; the total realizations during 1889-90 exceeded those of any previous year. The average receipts were highest in Calcutta (Rs. 19,51,882) and lowest in Singbhoom (Rs. 10,833). The incidence is highest throughout East and Central Bengal, where trade is brisk and the population most prosperous. The general incidence of stamp revenue on the population of Bengal, estimated at 66 millions, is 3 annas 4½ pies per head.

3. Another table which has been compiled in the office of the Superintendent of Stamps shows the receipts from sales of the different descriptions of stamps during the same period. The figures will differ from those given in the previous statement, inasmuch as they do not include miscellaneous receipts or receipts from the sale of plain paper prescribed by the High Court for use with court-fee stamps. They show stamp sales only, but apart from these differences there

is a small discrepancy with the Accountant-General's figures which is under adjustment:—

	SAL	es of Nor	N-JUDICIA	L STAMP	8 USED	UNDER T	HE IND	IAN STA	мг Аст		SALES OF OR STATE	JUDICIAI MPS USED COURT-PE	UNDER	stamps.
YEAR.	Impressed sheets, in- cluding certificate stamps, salt bond, p. W. D. forms, bills- of-lading and kabuli- yat form stamps.	Impressed labels.	Receipt or one-anna revenue stamps.	Share transfer stamps.	Foreign bill stamps.	Hundi or bills-of- exchange stamps.	Notarial stamps.	Advocate, vakeel, and attorney stamps.	Impressed one-anna stamps for cheques, bills, &c.	Total of non-judical stamps.	Adhesive and impress- ed court-fee stamps.	Stamps for copies.	Total of court-fee stamps.	Total of both kinds of stamps.
1886-87 1887-88 1888-89 1889-90 Average of three years, 1887-88 to 1889-90.	24,12,972 25,71,263 26,89,643	88. 5,85,492 5,76,248 6,32,463 6,41,927 6,16,879	Rs. 2,32,638 2,22,353 2,28,794 2,40,757 2,30,634	Rs. 17,771 32,634 44,840 26,668	Rs. 39,065 50,981 51,318 42,731	Rs. 86,643 96,210 1,11,754 1,18,673	Rs. 4,573 3,320 3,014 3,114	Rs. 10,000 7,250 12,750 15,750	Rs. 44,616 49,283 48,207 47,260 48,250	Rs, 33,92,184 34,51,251 37,04,493 38,26,523 36,60,725	Rs. 93,06,760 95,50,446 93,23,219 95,71,539 94,75,068	Rs. 5,06,368 5,48,859 5,71,915 5,79,875 5,66,883	Rs, 98,13,128 1,00,72,305 98,95,134 1,01,51,414	Rs. 1,32,05,31 1,35,30,53 1,35,59,53 1,39,77,63

There has been a steady increase in non-judicial samp stales, which was shared by almost all classes of stamps. The average Non-judicial stamps. yearly receipts of impressed sheets, which are the most important of non-judicial stamps, show an increase of Rs. 1,86,573, or 7.8 per cent., as compared with the receipts in 1886-87. The increase was contributed by 39 districts, notably Mymensingh, and is ascribed to the normal growth of business and a growing tendency to substitute written agreements for verbal contracts. Impressed labels, which are available only in Calcutta, show an increase of Rs. 31,387, or 5.3 per cent. The sale of one-anna revenue stamps, commonly known as receipt stamps, shows a falling off of Rs. 2,003, or 8 per cent., as compared with 1886-87, but an increase of Rs. 11,963 in 1889-90 as compared with the preceding year. The other classes of non-judicial stamps, which are of minor importance, show increases of Rs. 16,943 under share transfer stamps, Rs. 9,278 under foreign bill stamps, and Rs. 22,236 under hundi or bills-of-exchange stamps, and a decrease of Rs. 1,424 under notarial stamps.

4. The average income of the past three years from the sales of judicial stamps is Rs. 91,67,320 under court-fee stamps, Rs. 3,05,415 under Calcutta Small Cause Court stamps, and Rs. 5,66,883 under stamps for copies, making a total of Rs. 1,00,41,951, an increase of Rs. 2,28,823, or 2·3 per cent., over the income from the same sources in 1886-87. The largest increases were in Midnapore (Rs. 52,511), Tipperah (Rs. 46,256) Monghyr (Rs. 40,500), Rungpore (Rs. 29,054), Calcutta (Rs. 23,996) Mozufferpore (Rs. 23,037), Mymensingh (Rs. 20,608), Khoolna (Rs. 15,693); and the largest decreases were in Pubna (Rs. 33,635), 24-Pergunnahs (Rs. 28,990), Nuddea (Rs. 12,753), Bhagulpore (Rs. 11,592), and Gya (Rs. 10,069). Taking each denomination of court-fee stamps sold during the period under review, there was an increase of nearly 3 lakhs in the sale of one-anna stamps, 2½ lakhs in that of ½-anna stamps, 2½ lakhs in that of 12-annas stamps, and 2½ lakhs in that of 1-rupee stamps, and a decrease of a lakh under 6-annas, Rs. 49,579 under 2-rupees, and Rs. 16,123 under 4-rupees stamps. The decrease in the sales of stamps of higher values, accompanied by an increase in the sales of stamps of lower values, is probably due to the fact that stamps of lower values on which the higher rate of discount is still allowed are used in combination for stamps of higher values on which the discount has been reduced.

- 5. The revenue from the sale of stamps of all classes has increased from Rs. 87,88,026 in 1874-75 to Rs. 1,27,76,907 in 1884-85 and to Rs. 1,39,77,937 in 1889-90.
- 6. The number of cases in which deficient stamp duty and penalty were levied by Civil and Revenue Courts during the last four years, and the amount realized in these cases, are exhibited in the following table:—

								NUMBER O	P CASES.		F DUTY AND REALIZED,	To	CAL.
	86-87	YEAR					Civil Courts.	Revenue officers.	By Civil Courts,	By Revenue officers,	Cases,	Amount	
1886-87 1887-88 1888-89 1889-90			::				::	1,871 1,400 1,277 1,338	2,173 2,122 2,076 2,399	Rs. 12,337 10,555 11,107 11,127	Rs. 21,643 23,010 22,022 24,869	3,544 3,522 3,363 5,787	Rs. 33,980 33,565 33,129 35,996
Average	of the	ree ye	ars, 18	87-88	to 1889	-90	***	1,334	2,198	10,952	23,298	3,532	34,250
Average with 1			n the	trien	nium 	comp	ared		25		1,655		250
Average with 18			n the	trien	nium 	eompe	red	37		1,385		7	

of the stamp law was 816. The average number of persons brought to trial was 929, of convictions 740, and of acquittals 116. The average amount of fines imposed by Magistrates was Rs. 6,626, while Rs. 1,756 were disbursed as rewards to informers. The Board bring to notice the fact that not a single rapee was paid as reward in the Patna, Orissa, and Chota Nagpore Divisions, in three out of the four districts of the Bhagulpore Division, in five out of the seven districts of the Rajshahye Division, in four out of the six districts of the Presidency Division, and in three out of the five districts of the Burdwan Division. This would seem to show that this important subject has not met with due attention on the part of local officers, for it is on the encouragement afforded by a liberal distribution of rewards that detection of infringements of the stamp law must largely depend.

8. The Board dwell at some length in their report on the evasion of duty in respect of probates, letters and certificates of administration, and remark on the absolute necessity of providing some agency for checking the valuation of estates of deceased persons by executors, and also for adjudicating on the valuations when objected to. This question has already formed the subject of a special correspondence between the Board, the High Court, and the Government, and the Lieutenant-Governor would prefer to deal with it separately from the triennial report.

9. The Lieutenant-Governor's acknowledgments are due to the Board for their careful administration of the Stamp Department. The names of the officers who have been mentioned as specially deserving of credit will be noted in the Appointment Department.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

Secretary to the Govt. of Bengal.

# Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 11th October, 1890.

1	No.	District and de return.	ite of	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
BEN	NGA	Western Dist	ricts.		
1	1	Burdwan O Culna Cutwa	et. 11, '90	1.60 1.17	Weather—hot. Prospects of amun and sugarcane good. Prices of common rice:—  Srs.
		Ranigunge		0.01	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	2	Bankoora	,, 11, '90	Nil	Weather—warm and cloudy. A smart shower on the 11th. Harvesting of aug paddy proceeding. Prospects of amun paddy continue good. Commor rice selling at 19 seers per rupee at the Sudder station and 17½ seers at Bissenpore.
DIVN.	3	Birbhum Rampore Haut		0.75	Storms seem to be gathering, and some good showers may be expected. Prospects of crops as good as can be all over the district. Price of rice 17 to 18½ seers per rupee.
BURDWAN DIVE.	4	Midnapur	., 11, '90	0.22	Weather—sultry with occasional slight showers. Prospects of crops in irrigated areas excellent, elsewhere fairly good. Some complaints of too much rain in the Contai subdivision. Indigo being sown. Prices of common rice:  ———————————————————————————————————
B					Sudder 15 Contai 19 Tumlook 15 Ghatal 16
	5	Hooghly Serampore Jehanabad	,, 11, '90 	Nil 0.89 0.55	Weather—clear. Temperature increasing. Prospects excellent. Outturn of jute and aus estimated at 12 annas. Prices of common rice:—  Srs.
		Howrab	., 11, '90		Scrampore 13 per rupee.  Jehanabad 16  Weather—generally fine. Prospects of crops satisfactory. Amun crop doing
(	6	Uluberiah Contrai Distr 24-Perghs.	iets. Oct. 14, '90	0·18 1·72	well. Price of common rice 14 seers per rupee.  Weather—rainy, overcast and unsettled at the end of the week. Prospects of amun paddy continue excellent except in the small flooded area of the Bussirhat subdivision. Lands being prepared for rubbi crops. Prices
VN.	7	Kushtea Meherpore Chuadanga	" 11, ′90 	0:27 Nil 1:25 0:41	stationary.  Weather—seasonable. Amun rice doing well. Sowing of winter crops going on. No change in the price of rice.
IDENCE DIVE.	8,	Ranaghat Khooins Bagirhat Satkhira	., 11, '90	0.54 0.84 Nil 0.63	Weather—bright and warm. Transplantation of amun nearly completed. Prospects good except in the flooded thanas.
PRESTD	9	Jessore Jhenidab Magura Nacail	., 11, '90	0.69 0.15 Nil 0.76	Weather—warm and fine. Prospects very good in Magurah and Narail. Sowings of cold-weather crops in progress. Price of rice steady.
(	10	Bongong	., 11, '90	0.60	Weather—bright and clear. Prospects of amun favourable. Kalai is still being sown. It is being resown on lands submerged by the recent rise of the rivers. Water gradually going down. Agricultural loans and gratuitous
i	11	Dinagepur Thakurgaon	,, 11, '90 	0·40 0·11	relief are still being given.  Weather—seasonable. Prospects continue favourable. Outturn of haimanti- rice may at present be estimated at almost 20 annas. Price of rice un-
Section 1	12	Rajshahye Nattore Nowgong	" 11, '90 …	2:08 0:08 0:39	changed.  Weather—dry; clouds passing; rainy to-day (11th). Aus paddy gathered.  Jute steeping and cleaning continue. Other crops thriving and flood receding. Prospect of haimanti paddy good. A tornado passed over villages Jonail and Dighsoil in subdivision Nattore south to north, rising from Bulsatoil towards Beeichalan. About 22,000 bighas paddy and some 400 houses destroyed.
RAJSHAHYR DIVE.	13	Kungpur Nilphamari Kurigram Gaibanda	,, 11, '90 	Nil 1·23 2·90 1·45	Weather—cool and pleasant in the morning, but sultry later on. Rain is evidently impending. The mischief done by the storm of the 26th—28th extends over 200 villages which have lost the greater part of their crops. A tornado with a course of 2 miles in length by 120 feet in diameter has awept everything away on its track. Generally, however, prospects are excellent all round.
RAJSHA	14	Bogra Sherpur Nowkhilla	., 11, '90 	Nil 0.03 Nil	Weather—fine, with northerly breeze. Hot sun. The recent flood in the north and west of the district has destroyed or damaged a considerable area of transplanted rice: in those parts the outturn on the whole may perhaps be 10 annas, but the inquiries are not yet complete. Some jute has also been destroyed, but the outturn has been on the whole very large. The broadcast amun has been rather benefited, and elsewhere the amun rice of both kinds is mostly in excellent condition. Sugarcan promises generally well. Ploughing is going on, and mustard and kalai are being sown. Com-
	15	Pubns	,, 11, '90	Nil	mon rice is selting at 18 seers per rupee.  Weather—rather hot. Rubbi sowings have commenced. Prospects of winter
	16	Darjeeling Silliguri Julpigoree	" 11, ′90 " 11, ′90	1.73	crops continue as before. Prices of food-grains have risen higher.  Weather—fair. Prospects good. Haimanti paddy doing well in Terai. Lands being prepared for rubbi crops.  Weather—hot and cloudy. Prospects of all crops generally good. Harvesting

1	No.	District and return		of	at St	sunfall Sudder ation in nches.	
-		L-concluded.					
BE	NUA	Eastern D	interior				
	18	Dacca	Oct.		90	1.12	Weather—hot and fine. Harvesting of jute nearly completed. Amun doing well. Asvini paddy being harvested. Fodder is available. Common rice sold at from 14 to 15 seers per rupee.
DIVE.	19	Furreedpur	,,	11,	90	Nil	Weather—seasonable. State of amun crop fair. Common rice selling at 12 seers per rupee at the head-quarters station, and 13 and 14 seers per rupee at Goalando and Madaripore respectively.
DAGGA	1		10			y is a	
D	20	Backergunge	33	11, '	90	0.74	Weather—seasonable. State and prospects of standing crops good. Common rice selling at about 134 seers per rupee.
	21	Mymensingb	"	11, '	90	0.59	Days hot and sultry with occasional clouds. Mornings cool. Harvesting of jute continues. Prospects of amun paddy favourable. Coarse rice sells at 123 seers per rupee.
LAM.	22	Chittagong	.,	11, '	90	1.02	Weather—seasonable. Aus has been reaped, and the outturn is up to the average. Prospects of amun good. Prices steady.
owa Di	23	Noakholly	"	11,	90	0.39	Weather-variable: very warm and sultry. State of amun plants good. Price of rice stationary.
Спіттавока Вічи	24	Тіррегиь	,,	11, '	90	0.10	Weather—hot; calm. Jute cutting almost completed. Standing crops promise well. Amus expected to yield 16 annas. Prices stationary.
	25	Chittagong Hill Tracts.		9, '	90	0.51	Weather—very hot and close throughout the week, but a fall of rain on the 8th has lowered the temperature. Harvesting of jum paddy continues. Late rice in low lands progressing. Lands being ploughed for mustard. Common rice being sold at 12½ seers per rupee.
		Hill Tipperah					Report not received.
BE	HAR 26	Patns Barh Behar			]	Nil Nil	Weather—hot. Paddy and other crops on the ground are doing well. Rubbi and poppy fields are being ploughed. In some places sowing of rubbi crops has been commenced. Prices of food-grains almost stationary.
100	27	Dinapore Gya		11, 1		0.27 Vil	Weather—seasonable. Prospects of paddy favourable. Sowings of rubbi commenced. Sugarcane doing well. Prices of food-grains falling.
. 8.	28	Shahabad Buxar Bhabuah	,, 1	11, "	. 1	Nil Nil	Weather—fine and sunny. Signs of cold weather. Prospects of crops good.  Prices stationary in subdivisions; slight rise reported in Arrah.
PATER DIVE	29	Sasseram Durbhunga		1, '8	90 1		Weather—mornings and nights getting cool, but days still hot. The late hathia rain has done much good to the crops, but some rain is still wanted for the rice crop on high lands. Rubbi sowings commenced. Transplanting of tobacco in progress. Prices almost stationary.
	80	Mozufferpur Hajipur Sitamarhi	,, 1		1	Nil Nil Nil	Weather—dry and still warm. Prospects of rice crop excellent, especially in the Sitamarhi subdivision. Sowing of rubbi crops proceeding. Prices stationary.
	31	Sarun	., 1	1, '	90	0.05	Weather—seasonable and fine. Prospects of crops excellent. Preparation of land for rubbi going on. Mustard already sown in places.
	32	Chumparun	" 1	1, '§	90 1	Nil	Weather—seasonable. A little cloudy since last night (10th). Rains apparently over. Prospects of paddy very good. Ploughing of fields for rubbi sowings commenced.
	33	Mongbyr Beguserai	,, 1	1, '9	. 1	Nil	Weather—days hot and nights comparatively cool. Prospects of winter rice continue favourable. <i>Rubbi</i> sowings in progress and prospects good.
DIAM.	34	Jamui Bhaguipore Banka Mudhepura	,, 1	11, %	00 1	Nil 0.82	Weather—hot sun. Mornings and evenings fresh and cool. Prospects of rice crop excellent. Lands being prepared for rubbi crops.
BHAGULFORR DIVE	35	Soopool Purneah Kishengunge Arrareah		1, %	00	0·15 0·35 0·26 0·41	Weather—fine with fresh mornings. Prospects everywhere favourable. Rubbi crops being sown. Kurthi germinating. Prices stationary.
9	86	Maldah Chanchal Shibgunge Gajole	,, 1	1, %	. 1	0·14 Nil Nil 0·10	Weather—first part of the week hot and bright, latter part unsettled. Sowing of kalai pulse is progressing. Prospects of winter rice continue favourable, and land is being prepared for rubbi crops. Common rice selling at from 13 to 18 seers per rupee.
	37	Sonthal Perghs. Deoghur Godda Jamtara Pakour Rajmehal	" 1	1, '4		0·79 Nil 0·95 0·44 0·22 0·11	Weather—very hot. Cloudy with occasional storms. Prospects of paddy crop excellent. Rubbi sowings have begun.

	No.	District and return		Rainfall at Sudder Station in inches.	
ORI	ISSA.	2.00	il a diagram		
DIVE.	88	Cuttack	Oct. 11, '	00 Nil	Wenther—dry and hot. Sowing of rubbi continues. General prospects of crops good.
ORIBSA	39	Pooree Khoorda Banpur	,, 9, 1	1.54	Weather—seasonable. Sarad crop is being weeded. Mandia is being harves ed. Miscellaneous crops doing well. Price of common rice 18 seem chittacks to 26 seers 4 chittacks per rupee.
СН		Balasore NAGPORE. Ch-West Frontier	" 11, " Agency.	0.08	Weather - cooler. Condition of the rice crop is generally fair except in the north-east of the district. More rain is now wanted.
IVN.	41	Hazaribagh	Oct. 11, *	90 1.10	Weather—seasonable. Prospects of winter rice continue excellent. Sugarcan doing well. Rubbi crops being sown.
NAGPORE DIVE.	42	Lohardugga Palamow (up to	,, 11, '	00 0·11 Nil	Weather—seasonable. Harvesting of gora rice continues. Prospect of winterice favourable. Ploughing of rubbi lands is being carried on.
CHOTA NAGI	43	Singbhoom	Oct. 11, '	00 0-28	Weather—seasonable. Prospects satisfactory. Outturn of high-land padd will be 8 to 12 annas, and low-land paddy is expected to yield 12 to 16 anna Other crops are also doing well. Prices stationary.
	44	Manbhoom Govindpore	10	90 Nil Nil	Weather—hot during the day, coal in the night. Excepting Jhalda, when beavy rain is reported, there was little or no rain during the week. Prespects of crops good. Coarse rice selling at from 16 to 24 seers per rupes.

Published for general information.

CALCUTTA; REVENUE DEPT., The 14th October, 1890. C. E. BUCKLAND, Offg. Secy. to the Govt. of Bengal,

# STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

				a de la companya de l	8тос	K IN HAND AS	OMPILED ON-						
NAMES OF MARTS.	2nd week of Oct, 1889.	1st week of Nov. 1889.	1st week of Dec. 1889.	lst week of Jan. 1890.	1st week of Feb. 1890.	1st week of Mar, 1890.	1st week of April 1890.	1st week of May 1890.	1st week of June 1890.	1st week of July 1890.	1st week of August 1890.	1st week of Sept. 1890.	1st week of Oct. 1890
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Md
Balinghetts	5,06,000	4,54,000	2,95,500	3,00,000	5,48,000	9,31,100	15,22,500	10,94,000	9,85,500	7,54,000	6,42,000	5,41,000	4,10,00
Ooltadangs	71,900	67,400	55,400	63,400	83,900	1,02,500	1,12,500	86,600	84,700	74,900	67,800	73,800	65,8
Chitpore, Golabaree, Coomer- tooly, Hatkhols, and Culpy Ghat.	6,74,100	6,33,300	5,88,000	6,00,400	5,98,900	5,83,800	5,91,600	5,37,800	4,79,200	4,96,100	5,10.590	6,07,500	6,45,1
Pathuriaghatia, Posts, and Jorabagan.	5,000	8,000	3,000	4,000	5,600	4.000	3,000	4,000	3,500	4,000	3,000	4,000	5,0
Taliygunge, Chitlah, Kidderpore, and Moonshigunge.	64,550	65,200	68,100	82,750	98,100	1,21,500	1,26,550	1,32,900	1,19,450	1,04,700	96,000	94,200	1,09,2
21 Minor Basars (estimated)	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,0
Other retail shops, 3,129 in number (estimated).	2,50,900	2,50,000	2,50,000	3,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,0
Boidyabatty, Newabgunge, Bhuddressur, and Chander- nagore.	14,382	13,410	14,080	28,425	19,606	33,469	31,225	19,369	22,762	45,879	55,887	45,481	47,0
Total	18,25,932	17,31,310	15,18,080	15,68,975	18,43,500	22,66,369	28,77,375	23,64,669	21,85,112	19,69,579	18,65,187	18,55,481	17,67,1
On Railway premises on both	8,208	14,011	6,677	28,007 (on 3rd	26,935 (on 3rd Feb.	47,988 (on 3rd	24,996 (on 3rd	24,633 (on 3rd	11,927 (on 3rd	15,533 (on 3rd	2,371 (on 3rd	13,884 (on 3rd	11,1 (on 3rd
sides of the river.	(on 3rd Oct. 1889.)	(on 3rd Nov. 1889.)	(on 3rd Dec. 1889.)	Jan. 1890.) 61,641	1890.) 68,796	Mar, 1890.) 56,599	Apl. 1890.) 37,745	May 1890.) 30,197	June 1890.) 24,756	July 1890.) 23,351	August 1890.)	Sept. 1890.) 27,167	October 18
On boats un. By Port Com-	17,852 (5th to 7th Oct, 1889.)	21,324 (1st to 3rd Nov. 1889.)	29,650 (1st to 3rd Dec. 1889,)	(2nd to 4th Jan, 1890.)	(tst to 3rd Feb. 1890.)	(1st to 3rd Mar. 1890.)	(1st to 3rd Apl. 1890.)	(1st to 3rd May 1890.)	(1st to 3rd June 1890.)	(1st to 3rd July 1890.)	(1st to 3rd August 1890.)	(1st to 3rd Sept. 1890.)	(1st to 3r October 1
loaded turns.	45,922	14,718 (1st to 3rd	8,835 (1st to 3rd	1,31,815 (2nd to 4th	2,42,044	1,84,547	58,619	23,975	23,957	22,388	18,546	32,468	23,4
(By Canal returns	(5th to 7th Oct. 1889.)	Nov. 1889.)	Dec. 1889.)	Jan. 1890.)	(1st to 3rd Feb. 1890.)	(1st to 3rd Mar. 1890.)	(1st to 3rd Apl. 1890.)	(1st to 3rd May 1890.)	(1st to 3rd June 1890.)	(1st to 3rd July 1890.)	(1st to 3rd August 1899.)	(1st to 3rd Sept. 1890.)	(1st to 3: October 18:
Grand total of Stocks	18,97,914	17,81,863	15,49,242	17,90,438	21,81,281	25,05,503	29,98,735	24,43,474	22,45,752	20,30,851	19,40,882	19,28,998	18,34,
Probable stock available for exportation by sea.	. 8½ lakhs	7½ lakhs	5 lakhs	7) lakhs	11½ lakhs	14 lakhs	19‡ lakhs	14 lakhs	12 lakhs	92 lakhs	9 lakhs	8‡ lakhs	72 lak

STATISTICAL DEPARTMENT, The 7th October, 1890. C. E. BUCKLAND,
Offg. Secy. to the Govt. of Bengal.

The following Statement shows the Quantities of the Principal Staples of Traffic imported into Calcutta from the Inte during the month of April, 1890.

IM: ORTS INTO CALCUTTA.

			FOO	D-GRAIN	18.	T CAP			FIBROUB]	PRODUCTS.	Orre	SEEDS.	Contact of	183	W	Su	GAR.	Ton
Whence imported.		AND PA	Total	Wheat.	Gram and pulses.	Other food-grains.	Tot	nl.	Jute, raw.	Gunny- bags.†	Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	Drained.	Undrained.	Unmanufac- tured,
	Rice.	Paddy.	rice).				N.				1	1,015				Dra	Up	Um
BENGAL.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Md	8.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Burdwan	1,79,199	2,979	1,81,061	2,134	3,329	38	1,86	,562	1,637	8,600 4,095	3,353 10,185	425 138			25 328		420	7
Beerbhoom	89,957 1,92,882	22,547	89,957 2,06,974	3,624	2,376	200	2,08	675	*****	2,600	18,593	6,556		5	336	22	856	164
Midnapore	33,320	14,490	42,376	5,166	6,936	123	54	,601	25,873	262,373	6,489	1,927	******	1,471	******	1,398	21,125	8,383
4-Pergunnahs	1,37,828	8,406	1,48,082	82,155	5,982 88,957	4,973	1,49 1,86	,118	29,799 8,595	1,685	8,052 64,388	10,114	******	75	259	10,383	7,651 10,608	3,761
Nuddea Khulna	3,045	1,851	4,202	******	100	4,010	- 4	,302	1,097		1,147	2,863	*****			200	5,000	
essore	8,282	2,275	9,704	161 2,277	3,157 5,900	368	13	,022	7,801	1,540	13,260 8,149	7,630 203	Person.	142	536	322	15,995	2,462
Moorshedabad Dinagepore	3,280 28,461	******	28,461	2,011	0,000	905	28	461	251	111.510	4,450	1.979	******	*****	****	******		111
Rajshahye	3,299	******	3,299	******	2,556	******	5	,855	2,519	315	*** **	1,409 4,208	******	929	169		******	15 040
Rungpore	27,655	******	27,655		******	******	27	,655	43,056	72,275	1,938			******		******		15,039
Bogra	******			******	9,643		9	,643	1,35,484	533,400	203	12,279	7 800		*****	0000		114
Darjeeling	. 8	******	- 8	******		******	-	8	336 14,414	55,090 169,995		1,279	1,509	******	*****	******		268 1,253
Julpigoree	******	******		******			***	***	1,31,679	785	1,362	16,320		5,183	*****			1,000
Furreedpore	1,750	450	2,031	. 5,857	2,529	******	10	,417	34,264 2,500	1,575	13,789	1,550	******	1,048	******	150	128	744
Backergunge	1,47,499	200	1,47,811	******	600	******	1,48	5	22,218		716		******		******			1
Mymensingh Tipperah	1,350	*****	1,350	*****	******	******	1	,350	200	******	850	150	******	5,465		******	70000	***
Chittagong	9,261	200	9,386		******		c	386	700	******	400	850	13	700	******			"
Noakholly Total of Bengal	8,77,182	53,698	9,10,743	1,01,428	1,33,571	5,702	11,51	,444	4,64,682	1,772,646	1,57,324	1,10,639	1,820	15,417	1,662	12,591	61,278	34,643
Венав.							-							-		100		
Patna	54		54	2,056 2,469	70,459 623	1,785	7	1,092	254	4,375 140	1,29,280 31,080	28,595 2,435		2	******	481	1,181	57
hahahad	16	******	16	1,498	2,978	******	1	,492	,,,,,,	14111	42,096	4,270	******	*****	*****	127	4,912	
Mozufferpore	30	*****	30 26	2,156	******	1,503	1	,533	******	*****	4,078	8,387 33,447	*****		******	323	946	264
Barun	26			919	309		1	,491	******	105 140	53,786 6,390	2,954	******		******		315	19
Chumparun	*****		9	1,367	******		1	,367			8,585	32,394	******	9				
Monghyr	359	*****	359	37,878 20,714	40,164 26,593	11,181	1 78	847		140	18,802 56,670	2,853 18,708	******			2	41	***
Bhagulpore	6,351	*****	6,351		666		1	,017	1,257	500	583	7,513		8	*****	******		2,074
Maidah Southal Pergun- nahs,	972 647		972 647	1,417 83,081	22,642	1,255	1,0	,625		315	977 41,495	1,389 16,406		. 17	68	125	*****	
Total of Behar	8,457		8,457	1,53,555	1,66,175	15,728	5,47	1,915	1,511	5,8201	3,88,817	1,59,351		47	68	1,058	7,402	2,414
ORISSA.	-		T-	17			-	-	57303	-								A.E.
Cutterale	101		101		December 1	77000		101		A-1737 - 13	V. Section 3				*****			
Cuttack Balasore	1,16,802	16,478	1,27,101		124	******	1,27	,225	445	5,700	102				******			152
Total of Orissa	1,16 903	16,478	1,27,202	,	124		1,27	,326	445	5,700	102							152
CHOTA NAGPORE.			1		0.5	-		I L						7.5	1			
Hazaribagh Manbhoom	7,852	******	7,852		*****	******	;	,852		945	289 296	4,640	16		23	*****		
Singbhoom	*****	******			•••••							535	*****			******		
Potal of Chota Nag-	7,852		7,852		1		1.00	,852		1,015	585	5,818	19		23		1000	
Grand Total of supplies from the Provinces under the Lieut-nant-	10,10,394	70,176	10,54,254	2,54,983	2,99,870	21,430	16,30	,537	4,66,638	1,785,181	5,46,828	2,75,808	1,839	15,464	1,753	1 13,649	68,680	37,209
Governor of Ben-)								_		-	EN.		100		6.70%			_
THER PROVINCES.					20 13		11											
Assam North-Western Pro-	64 28	******	61 28	1,60,526	23,160	309	1,93	,023	2,633	105	4,203	52,559 30,742	1,846	3,879 49,207	160	64	1,818	:::
vinces and Oudh.	10	Section 1	30	492		907	O COLOR	TOTAL CO.		13.0			48	10,336				
entral Provinces		*****	10	7,336	912	305	7	,719	*****		9,713		400		10	*****	*****	1
tajputana and	******			*****		5		5			21,101	******	******	25,105	*****	******		
Central India.	87.	******	87				-	37						14,663				
Indras	*****	******			223	*****		223			*****	*****	******	1,484	*****	2,721	*****	106
Surmah	2,733	******	2,733		2,868	512	6	,118 10¢	184	53,800			******	8,210	2	83,904		32
		17777	200	C. 1855.		0.00	1	200		51,500			_	-	-			1
	10.19.000	MO THO	20 49 024	a ma con-	D 400 0 00	Share where	Section 1		The state of the s	* 000	the state of the state of	0 80 400	0.700	7 00 040 1	9 2000	2 00 000	80 000	
	10,13,356	70,176	10,57,216	4,32,337	3,27,049	22,561	18,39	,163	4,69,455	1,839,086	7,06,272	3,59,109	3,799	1,28,348	1,927	1,00,338	70,498	37,347

The Sea-borne Trade of Calcutta in these Si 'aples during the month of April, 1890, was as follows :-

of Exports 1890 in April, 1889	13,87,279 10,23,582	6,592	13,87,659	2,04,511	70,784	10,803	16,78	,757	11,00,253	7,768,814	6,98,187	92,094	6,857	1,38,598	1,772	4,105	1,770	1
otal of Foreign	7,91,930	14	7,91,939	1,98,451	47,254	9,793	10,47	,487	10,99,341	1,855,742	6,98,187	49,134	6,359	1,88,567	1,508	253	63	
United Kingdom Other Foreign ports	1,91,657 6,00,273	14	1,91,657 6,00,282	1,87,862 10,589	5,710 41,544	9,793	3,85 6,62	,229 ,208	4,20,721 6,78,620	1,634,700 221,042	5,18,050 1,85,137	46,346 2,788		17,963 1,20,604	1,055	253	 63	200
portal trade Foreign ports -	5,95,849	594	5,95,720	6,060	23,530	1,010	6,26	,320	912	5,913,072		42,960	498	31	269	3,852	1,707	
ports Pondicherry Sind tal of Inter-	2,036		2,036	123 190	2,934			,093 199		307,950 207,200 10,000			1			1,844	1,584	
Madras Other ports in Madras Burmah	361 2,84,045 7,053	539 28	361 2,84,382 7,069	15 5,723	6,039 2,577 11,930	143 299 301 267	3,02 6 2,87 24	,065 ,699 ,275 ,989	893	4,080,200 27,000 155,022 1,125,700		1,614	439	 31	264 3 2	1,263 129 42 574	283	2011
CALCUTTA—  O Indian ports, viz.— Bombay	3,01,854	20	3,01,872		**					4.000.000		41,846				1.000		1

<sup>\*</sup> One maund of paddy is equivalent to 25 seers of ric e. ! † Exclusive of bags obtained by local manufacture;

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic imported into Calcutta during the month of April, 1890.

### IMPORTS INTO CALCUTTA.

	AVII COMPANY	Fo	OD-GRAIN	B.		FIBROUS P	RODUCTS,	OILSI	EEDS.				Su	GAR.	Ton	ACCO.
CIPICATION OF BOUTES.	Rice.	Paddy.	Wheat.	Gram and pulses.	Other food-grains.	Jute, raw.	Gunny- bags.	Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, rnw.	Drain- ed.	Un- árain- ed.	Unmanu- factured.	Manu- factured.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
ntry boats r steamers (East Indian	4,57,178 13,969 2,87,323	43,450 703 6,986	51,293 619 8,31,045	70,388 6,351 1,87,501	2,186 16,655	1,02,997 1,63,135 1,659	773,076 24,045	39,476 48,079 5,36,807	28,817 79,930 1,86,702	1,626 133	2,599 5,627 84,695	136 209 992	4,031 78 1,123	17,042 9,258	25	21-
Railway.		1	-49,380	53,369	3,208	1,74,676	950,565	78,012	63,660	2,027	5,271	588	41.11	22,805	19,500	*****
State Railway.	63,271 1,17,80/	5,958 13,078		6,209 8,231	512	24,937 2,651	31,900 49,500	8,796 102		<u>i</u> 3	634 29,522	2	8,482 86,625	21,393	6,842 290	278 468
notal of (1890	10,13,356	70,176	4,82,337	5,27,049	22,561	4,69,455	1,839,086	7,04,272	3,59,109	3,799	1,28,348	1,927	1,00,338	70,498	37,347	1,65
rts in \( 1889	8,32,495	1,11,488	4,34,452	3,71,062	42,189	2,91,527	1,543,232	6,88,067	2,55,079	4,021	61,327	1,989	17,691	1,28,553	41,730	8,930

e following Statement shows the Values, Quantities, and Numbers of the Principal Staples of Traffic exported Luland from Calcutta during the month of April, 1890.

### EXPORTS FROM CALCUTTA.

	Cotton piece	e-goods.	Cotton t	wist.				Cottonpie	ce-goods,	Cotton	twist.		
exported.	Earopean.	Indian.	European.	Indian.	Salt.	Gunny- bags.	Whither exported.	Euro- pean.	Indian.	Euro- pean.	Indian.	Salt.	Gunny-bags
1				1		L. U.S. Law	CHOTA NAGPORE.	Ra.	Rs.	Mds.	Mds.	Mds	No.
	Rs.	Rs.	Mds.	Mds.	Mds.	No.	Hazaribagh Manbhoom Singbhoom	1,10,180 1,34,120 4,620	1,024	66 20	131 777 250	6,014 12,032 1,203	4,550 9,275 6,370
SOAL.	1	100	400	1,003	25,714	121,608	Total of Chota Nagpore	2,48,920	2,816	86	1,158	19,249	20,195
m re nnahs	2,89,990 2,16,650 2,11,180 1,31,744 1,75,189 4,21,277	1,280 512 100 3,600 6,407	400 278 1,653 519 291 1,645	781	15,965 86,740 3,008 10,624 23,270	75,495 10,358 33,985 16,372 83,340	Grand total of supplies into the Provinces under the Lieutenant-Governor of Bengal OTHER PROVINCES.	1,05,27,905	17,837	12,884	20,627	5,77,527	1,494,643
	1,06,400 1,45,290 1,40,350	384	1,071 1,071	37	4,015 20,570 1,013	1,120 4,260 80,660	Assum Provinces	7,71,130	William Print	977	562	22,700	14,945
8084 60 10	2,68,380 2,90,850 5,60,070 2,62,570		240 155 386 162		13,329 14,064 26,970 17,325 32,788	14,210 8,855 5,250 29,610 5,145	and Oudh	42,51,380 7,92,960 40,530 49,560 1,120	14,336 256 768	2,764 598 172 175	479 50	19,852	361,725 135,695 140,140 35,280
	2,09,860 1,45,110 1,74,230 4,83,540 2,81,560		213 177 259 2,688 441	21	8,270 11,107 10,168 92,507	210 1,260 13,970 21,455	Nepal Bombay Madras Pondicherry	3,937 59,075	787	243	1,237	4	4,080,200 181,022 207,200
mre	3,62,340 1,55,960		1,374	******	20,150 7,497 2,750	10,850	Sind Other places	93,646	1,001	231	1,482		1,125,700 10,000 1,855,742
-	1,17,020	50	123	16	5,975	3,000		1,68,07,584 1,47,88,143	39,821 55,161	18,064 25,859	36,974 13,023	6,20,083 4,82,853	9,642,203 12,604,419
Bengal	50,89,360	12,383	12,213	1,958	3,37,309	491,013	The Sea-borne Trade of 1890, was as follows:—	Caloutta i	n these 8	taples d	luring th	e month	of April
HAR.	a 10 070	896	45	347	20,142	186,225	IMPORTED INTO CALCUTTA-	Rs.*	Rs.	Mds.	Mds.	Mds.	No.
ore	6,42,670 3,32,290 5,64,260 2,38,280 4,11,670	1,152	26 17  18	936 418 48 1,045	13,534 21,051 8,721 30,675	42,560 47,495 28,455 81,830	From Foreign Ports— United Kingdom Other Foreign ports	90,61,549 48,264		8,794 443		4,78,967 2,49,919	53,800
n	6,43,510 6,68,010 3,28,160		6 13	83 60 636	15,023 11,730 13,533	12,740 27,930 81,900	Total of Foreign Trade	91,09,813		9,237		7,28,886	53,800
100	3,98,090 3,59,450	640	44 61  124	305 525 731	29,672 15,191 7,870 16,705	96,700 16,865 150 106,485	From Indian Ports— Bombay Madras Other ports in Madras	7,862	26,741		5,031	20,184	
rgunnahs	3,82,410		The Course of the London Course	-	1,96,937	678,485	Burman Other Indian ports	11,400	3,050		29	13,976	5,700
-	3,82,410 49,58,800	2,688	854	5,084	1,00,201	THE RESERVE OF THE PARTY OF THE							411.00
rgunnahs	-	2,688	854	5,084	1,90,201		Total of Interportal Trade	19,912	1,08,491		5,096	45,088	5,700
rgunnahs	-	2,688	854	19,427	24,032	1,000 303,050	Total of Interportal Trade Grand Total of Im- f 1890	19,912 91,29,725 1,81,19,026	1,08,491	9,237 13,374	-	-	

owing Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic exported from Calcutta during the month of April, 1890.

	COTTON PIE	CE-GOODS.	COTTON	wist.	Salt.	Gunny-bags.
SPECIFICATION OF ROUTES.	European.	Indian.	European.	Indian.	Salv,	
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
ats Sers Indian Railway Jern Bengal State Railway	1,28,500 8,45,190 1,09,59,450 39,23,570 2,31,820 7,18,954	4,700 27,776 5,407 1,938	607 2,348 4,129 8,671 661 848	583 8,592 100 27,690	1,31,128 41,092 2,67,229 1,53,477 5,021 22,136	51,697 43,111 1,592,115 182,315 5,300 7,767,814
d Total of Exports in April {1890	1,68,07,584 1,47,83,148	39,821 55,161	18,064 26,859	36,974 13,023	6,20,083 4,82,855	9,642,202 13,604,419

ISTICAL DEPARTMENT, is 10th October, 15-90.

Offg. Secretary to the Govt. of Bengal.

### Meteorological Report of the Province

2018					1125	asce.		81	ATIO	N OB	SERVA	TIONS.	140- 16	NA.	4.7	17	
				AIR I	PRESSUE	th.		10		TRMPE	BATUR	в.		Ним	DITY.	OL	ovn.
METEOROLOGICAL DIVISION	DISTRICT.	Representative stations.	Highest, 8 A.M., barometer read- ing of month.	Cowest, 8 A.M., barometerread- ing of month.	Mean, 8 A.M., for month.	Mean reduced to sea-level.	Variation from normal means.	Highest of month.	Lowest of month.	Mean daily maxi- mum tempera- ture.	Mean daily mini- mum tempera- ture.	Mean daily tem- perature.	Variation from normal mean.	Mean, 8 A.M., humidity.	Variation from normal mean.	Mean cloud amount, 8 A.M.	Variation from normal mean, 8 4. M.
		Pooree	29.874	29.594	29:712	29.724	-	94'7	76:6	8816	79:5	84°1 83°3	-0.1	87 86	Ξ	61	_
	Poores	False Point	29:867	29.224	29'696	29 718 29 782	018 018	88.2 83.5	75.8	87.8 87.4	78.7	82.8	-0.7	84	-3	6.9	0.8
	Cuttnok	Cuttack	29.807	29.524	29 655	29:737	004	95'4	748	90.0	78'0	84'0	+0:1	80	-2	6.6	0
·	Balasore	Balasore	29'833	29.550	29.684	29.743	- '002	94.4	72.8	88.1	77:6	82.9	+0.8	86	-	4:5	-
1	South-West Midnapore and South 24-Pergun- nahs	Saugor Island	20.880	29.664	29'727	29.758	+ 003	92.2	75.0	88.7	79'9	84'3	+0.7	88	-2	8:1	+0.6
	Midnapore	Midnapore	29'745	29.489	29.299	20'750	008	103.49	69.27	90.8	77.0	83'7	+0.8	83	-	88	-
	24-Pergunnaha, Howrah, and Hooghly.	Calcutta	29.890	29.619	29:734	29*756	+*005	92'5	71 7	87.6	76:9	82.3	-04	87	0	7.2	-1.0
	Burdwan	Burdwan	29'836	29'569	29.663	29:764	+ '006	95'6	74'9	90.1	78'5	84.8	+0.2	85	-1	7.6	-0.5
	Bankoora	Bankoora	29.578	29*333	29:429	29*730	003	96.1	73.1	89.2	77:2	83'2	-0.1	88	-	5.8	
	West Burdwan}	Ranigunge*	29.281	29:320	29'416	29.750	+:009	96'5	72.9	89.8	77.7	83 8	+0.7	86	-	6.2	
	Moorshedabad	Berhampore	29*853	29.601	29.693	29.760	+ '002	92.7	72.8	88*3	78:1	83'2	-0.1	90	+4	7.7	-0.8
	Moorshedabad	Krishnagore	29'864	29'614	29.710	29.758	+.014	P	9	9	9	9	P	9	1	7.2	
- [	Jessore and Khoolns	Jessore	29.885	29.623	29.731	29.766	002	95'8	75'4	89'4	79:0	84'2	+0.4	90	+8	81	-03
1	Chittagong	Chittagong	29.829	29'611	29.717	29:807	001	89.7	78'7	86'8	77'4	82.1	+0.7	88	0	5.9	-12
1	Chittagong Hill Tracts	Demagri		S. Th	1	7	767	Ot	serval	tions n	ot recei	ved.	-				
	Backergunge	Barrisal	29*891	29.663	:9.756	29:768	+*002	92'8	78.9	87'49	78'4	82.97	#111	87	-	62	1
	Noakholly	Noakholly	29:894	29.665	29'764	29.808	+ '028	88'5	73.8	85'9	76'9	81'4	-0.5	88	-	1.8	
1	Furreedpore	Furreedpore	29'894	29.650	29.749	29.788	+ '024	90.2	73.9	87 0	79.9	83'5	+1.0	87	-	5.5	-
	Dacca	Dacca	29.886	29-657	29:751	29'774	+'002	92.1	74 2	88.9	79'8	8+1	+0.2	86	-3	7.6	+0'4
i	Tipperah	Commillah	29.885	29'647	29.762	29.798	+'016	81.3	72'8	87'8	76'2	82 0	-0.2	88	die e	3.7	-
L	Mymensingh	Mymensingh	29.862	29.636	29.730	29:789	+.010	91.5	71 1	86'4	76'6"	81.2*	-0.4	92	- 7	7.0	-
1	Bogrs	Bogra	29.838	29.595	29 694	29.757	+ 0:4	91.3	71.6	87'3	76'8	82.1	-0.4	89		5.3	7
	Pubna	Serajgunge	29.877	29.619	29.728	29 775	+*012	89.6	71.7	861	78.4	8213	-0.4	89		7.1	-
	Rajshahye	Rampore Beau- leah.	29'851	29.597	29*693	29.764	+,018	91.8	73.6	88.0	78.5	83 3	+1'2	85	- T	2.8	100
	Maldah	Muldah	29:834	29.574	29.679	29*760	+ '076	94'5	70'5	89'6	78'3	8410	+0.4	87	-	3.0	-
	Dinagepore	Dinagepore	29.788	29.242	21.6524	29.7741	-:001	92.6	67:6	87.2	77'1'	82 2*	-0.7	91		7:8	-
	Rungpore	Rungpore	29*820	29.557	29.667	29.793	+ '016	93'8	66.7	87:3	75.6	81'5	-1'z	90	-	3:2	-
	Julpigoree and Cooch Behar.	Julpigoree	29.651	29.378	29.495	29.786	+*014	92'4	65.6	8515	74.0	79'8	-1.4	94	-	2'4	-
	Darjeeling Hill Tracts	Darjeeling	23'100	22.876	22'963	-	-:039	68 6	46.2	63:1	54'8	58.7	1'4	94	+2	8.8	+04
. 1	Purnesh and North	Purneah	29.794	29'536	29 685	29'763	+ '008	91'7	66.2	87'2	76'1	81.7	-1'6	88	-1	56	-00
	Bhagulpore.	Want de la constant d	0	29'459	001 774	Au-7904		94'3	68.2	88'4	78 8	83'6		0=			
1	Mozufferpore	Mozuflerpore Durbhunga	29.760	20'494	29.592	29:7361	+ '007	94'4	66.9	88.6	77.5	831	-0.2	87	-3	51	-0'8
	Chumparun	Markham	29'708	20.439	29'535	29:765	+*028	95.5	67:8	88.8	76.2	82'7	-0.5	84		5.8	-
	Sarun	Chupra*	29'704	29'450	29.535	29.729	003	96'3	69*2	882	78'8"	83*9*	+0*5	85	200	3.5	
		Dehree	29.551	29:261	29:371	29.727	018	93.8	67'5	89.3	77'4	83'8	+0.6	A 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		2.0	
1	Shababad {	Buxar	29.672 29.710	29°387 29°388	29'490	29.784 29.782	+.008	95'4	67°3	88.4	76.9	82.7 83.3	-0°2	84	-	2.8	11
	Gys	Gya	29*536	29*249	29-354	29:785	007	97.0	68'8	90.8	78-1	84'4	0	79	-2	5.0	-24
1	Patns	Bankipore	29.734	29'465	29.557	29.741	007	94.9	68.2	89'3	78.6	84.0	-0.8	81	-•	5'8	-14
	South Bhaguipore and Monghyr,	Bhagulpore	29*745	29'486	29.576	99.789	+*001	94'2	68.5	88'6	76'9	82.8	-0.3	86	-	5*3	1
	Sonthal Pergunnahs	Naya Doomka	29'414	29*167	29-253	29.753	+*011	94'8	71.3	88.6	78'3	82.5	+0.4	84	-	2.4	-
1 4	Hazaribagh	Hazarioagh	27'876	27*606	27.739	20.751	-'007	91.0	64'8	84'5	71.7	78:1	-0.5	85	0	81	0
NAGPUR.	Manonoom}	Ranchee	27.530	27.750	27.620	29.749	003	89.0	610	83.3	70:3	76.8	-0.3	82	-	6.2	1980
Z	Singbhoom	Chyebassa	29'117	28.878	28 974	29.742	+:011	94'4	71:2	88'7	75'6	82.1	-0.1	84	-	6.6	-
4.30	Assam	Sibsagar Dhubri Silenar	29'681 29'820 29'809	29°878 29°585 29°593	29*4959 29*676 29*701	29.8339 29.795 29.807	+ '018? + '002 + '004	94°1 89°7 95°6	67'4 69'8 67'8	87°1 83°6 89°4	75°0 76°0 75°0	81·1 80·0 82·3	-1.7 -1.4 -0.7	92	+1 0 +1	8.2 7.3 8.8	-05 +05 +07

<sup>\*</sup> Mean of 29 days.

gal for the month of September 1890.

		Sec. 340				BRYATION	TRICT OBSI	DIS			
				200		LL.	RAINPA				
DISTRICT.	Representative station.			15th May	Since	0.00	1907		Of month.		
		Normal mean num- ber of rainy days.	Mean num- ber of rainy days.	Variation.	Normal mean.	Mean of dis- triot.	Normal mean num- ber of rainy days.	Number of rainy days.	Variation from mean,	Normal mean.	
Pooree	Pooree Gopalpore False Point	67'9	79.7	+9:00	44*15	54.05	16-2	20'8	+5*79	10'15	94
Outtack	Outtack	67.8	78'4	+7'65	44'17	51.82	15'6	17:8	+7'45	9.33	8
Balasore	Balasore	66.1	69'4	+4.06	46'49	50.22	14.2	17:2	+7'32	11.10	42
South-West Midnapore and South 24-Pergun- nahs.	Saugor Island	74-3	75'7	-6.00	53-28	47 '28	15'9	15.7	+1*87	11'45	32
Midnapore	Midnapore	64'8	73.9	-1.10	46'34	45'24	13.0	15.6	+1*89	8.00	98
4-Pergunnahs, Howrah, and Hooghly.	Calcutta	79:7	74-1	+0'47	46'39	46'86	16.0	141	+1.02	8.25	57
Burdwan	Burdwan	67'6	74'0	+14'31	41.85	56'16	13.2	14.0	+4'81	7.67	98
Bankoora West Burdwan and Beerbhoom.	Bankoora {	72°8 55°8	70°1 79°0	-1·35 +7·52	48'01 47'99	46'66 55'51	15'5	18'5	+0.39	9°88	97
Moorshedabad	Berhampore	70'5	78-6	+7.35	45'44	52.79	14'7	14'2	-0'55	10.40	45
Nuddea	Krishnagore	69.6	75-2	+2 16	44'09	46'25	13.2	12'8	+1'50	8.29	109
Jessore and Khoolna	Jessore	75-2	78-8	-2.18	47'80	45.62	141	11.8	- 8.60	8'94	34
Chittagong	Chittagong	94'3	94.0	+10 06	103.74	113.80	17'8	17'0	-2.92	14'32	40
Chittagong Hill Tracts	Demagri	97.2	89.0	- 2.55	70.61	68.06	20.1	125	-3.54	19'55	31
Backergunge	Barrisal	93'3	90.1	-7:77	68.80	61.03	17:9	13'8	-5.58	12.12	84
Noakholly	Noakholly	76'8	97.0	-7°71 -12°01	96.79	80.08	18.7	1510	-5'71	16'76	15
Furreedpore	Furreedpore	81.1	85.3	-1:65	49'90	37'89	13'8	10'8	-4'95	9.05	10
Tipperah	G	85'3	70'9	7199	61.84	52°97 53°85	14.6	9:3	-6°60	11'25	57 as
Mymensingh	Mymensingh	80.7	83'0	+4.05	62.69	66.74	15.9	10'8	-5.70	13'04	58
Bogra	Bogra	69'8	84.6	+12.59	52.16	64.75	13.2	14'5	+6.09	10.41	50
Pubna	Serajgunge	71'8	87.5	+0'82	47-94	48'76	14'2	14'5	+1 97	10.42	35
Rajshahye	Rampore Beau- leah.	68'5	82.9	+16.11	48.89	65.00	13.8	13 0	+3'80	11'86	16
Maldah	Maldah	75.4	81.2	+4.80	49'71	54'51	14'8	11'5	+1-90	11.02	95
Dinagepore	Dinagepore	71.7	70.6	+17.73	52.60	70'83	13'6	914	+6.10	11.32	42
Rungpore Iulpigoree and Cooch Behar,	Rungpore Julpigoree	69·4 89·0	93°8 104°4	+32.30	68°20	139-54	13'6	17'0	+13'21 +3'64	13'44	65
Darjeeling Hill Tracts.	Darjeeling	102'0	118-6	+37.61	118-52	151'13	19'5	2115	+8'74	18:64	138
Purneah and North Bhagulpore.	Purneah	641	72'2	+20.06	54'88	74'44	13.9	8'4	+1*70	12:39	100
Mozufferpore	Mozufferpore	51'6	6917	+11:51	89.27	50.78	10.8	10.0	-1'81	8.00	18
Durbhunga	Durbhunga	52'3	68.2	+14-87	10.88	55'85	10.7	8.0	-3'31	9.80	nus
Chumparun	Motihari	51.2	61.4	+20'40	42'35 87'48	6275	9.2	5.0	-0.22	7'45	18
Shahabad	Dehree) Buxar	24.0	69-6	+12.47	87°46 85°76	6212	102	9.3	+0.43	7 07	'45
See.	Arrah	51.1	67.7	+18.77	37*74	56.21	7007	8.8	-1'94	6:79	85
Sya	Bankipore	55'5	64:2	+9'61	37.16	46.77	10.1	9.8	+0.23	7'04	107
South Bhaguipore and	Bhagulpore	59'5	69.8	+10.14	89 14	49:28	12.0	10'4	-2.26	7'91	35
Monghyr.		2017	T. C. W.							10.21	18
Sonthal Pergunualis	Naya Doomka	68:5 72:6	76.7	+6'70	46'35	53.05	13.9	11.2	-3.03	0 07	74
dasaribagh	Hazaribagh		73'3	+1.15	45'87	47'69 45'35	15.7	13'2	-1.88	8.00	199
Lohardugga	Ranchee {	75.0	78.5	-4.48	42'70	38.55	14.8	14.2	-1.50	7.69	718
ingbhoom )	Sibourar	817	78.0	-15.08	47:29	32-21	16 6	17-0	-1.19	8'52	

Table of Rainfall recorded at Stat

Interrological division.	District.	Station.	1	2	8	•	5		7	8	9	10	11	12	18	14	16	16	17	18	
)RYSSA	Pooree	Pooree Khurdah Banpur Gop Satpara Pipli	0.93	0°03 0°46 	0°31  0°32	2.08	0:23 1:83 0:06 0:20	0°06 1°58 1°06 	0°33 0°80  0°14	0 30 0 50 0 50  0 13 1 14	0°82 0°23  0°85 0°53	0.04 0.02 0.01	0.04	0°12 0°08  0°27	0°30 1°24 0°98 0°11	0°58 0°15 0°81 0°28 0°83 1°45	0.99 0.07 3.04 0.08 0.20 0.25	0°10 0°03 0°58 	 1'80 0'10 0'35 0'27	0.05 0.13 1.50 0.33 0.28 0.12	000000
	Outtack	Jagatsingpore Banki Cuttack Kendrapara Jajpore Dharmsalla Salipore	0'40		1.75   	0.05 0.49 0.81 0.33	2°10 0°85  0°50	0°10 0°02 0°60	0°40 0°68 0°45  0°20	0.03  0.23 		0°18 0°34 0°38 0°72	0°19 0°62 0°87 0°15	0.05 0.11 0.67 0.15	0°18 0°87 0°09 1°81 0°10 0°60	0°40 0°24 1°68	3.55 0.47 0.92 1.84 0.30 1.14	0°15 0°77 4°10 1°36 0°09 0°27	0.01 0.01 0.21 0.21 0.17	0°17- 0°14- 0°04- 0°22- 0°56- 0°15- 0°41-	
	Balmore	Chandbali Bhuddruck Sorah Balasore Jeliasore Baripodah	0°15	111111	2°40 0°10 0°17	1'20	1111111	0.51			0°12	0'80 0'72 	0.10	0°08 0°15 	0.44	1°80 '0°40 0°05 0°35	0°17 0°85 2 40 1 19 1 91 1 32	1°05 2°09 0°36 0°25 0°95 0°21	0°35 0°84 0°65 0°78 0°87 0°51	0'25 0'60 0'08 0'81 0'12 0'15	County Appearance
OUTH-WEST BENGAL.	Midnspore	Contai Saugor Island Tumlook Midnapere Ghatal Kukrahaty	 0'87 	111111		0°07  0°86		0.40	0'17		111111		0°50 		0.20	0°64 1°26 0°10 0°45 0°26	0.25 0.32 0.40 	0.58 0.24 0.40 0.52 0.54 0.68	0.08 0.11 0.10 0.45 0.07	0°74 0°20 0°20 0°23 0°08 0°34	CONTRACTOR OF THE PARTY OF THE
	44-Perguunahs	Diamond Harbour.  Canning Town Alipore Jail Barrackpore  Dum-Dum Baraset Buseerhat	 0.09		 0°38 0°09 1°28	0.04			1.22	0'44		0°31  	0°16  1°02 0°40	0.10	   0716	0.09 0.29 0.10 	1'45 0'45 0'53 0'27 0'26 1'98	0°47 0°20 0°72 0°52 0°23	0°10 0°08 0°45	0°18 0°10 0°29 0°48 0°17 	
	Howrah	Howrah Mohesreka (Oolooberiah).				=	=	:	0°07 0 60	0102			0.14		=	=	0°20 0°14	0.19	0.16	0.01	
	Hooghly	Serampore Hooghly Jehanabad			0.21	0.07	0.03		0.22		**	=	::	-		0.02 0.10 0.12	0.18	0°19 0°14 0°12	0°49 0°81 0°20	0.11	
	Burdwan	Culna Burdwan Cutwa Raneegunge Mankur	0.49	8.15	0°77  0°61	::	0.82 3.40	0.92	1111	1'64 0'19	0:55	0.10		0.00	11111	0°23 0°05 	0°37 0°57	0°06 0°08 0°24	0°48 1°20 0°40	111	
	Bankoora	Bankoora Bishenpore Maliara Khatra Indas Kotalpore Anda Gangajalghati Raipore Sonamukhi	0.42		0°12  0°30  0°19	0°25		0°07	*::::::::::::::::::::::::::::::::::::::	    0°51	0*80			0.60	6°50	0°46 0°90 0°C7 0°22 0°95	0*48 0*08   	0°31 0°30 1°40  0°32 3°13 1°88 0°65	0°94 0 96 0°05 0°39 0°37 0°66 0°11	0°20 0°40 0°35	
	Beerbhoom	Bh. Soory Hetampore Rampore Haut Bolpur Murarai			0.80	0.03	0°02 0°20 0°17 0°08	0.10	295	0.03	0°19	0.12	0°25 0°05 			11111	0°12 0°48 0°65	0.07	0.15	1141	
	Nuddes	Ranaghat Kishnaghur Chooadanga Meherpore Kooshtea	2'22	0°96	1.04 1.89		1°10 0°62	1°98 0°07	1 1 1 1	11111	 0°18 0°16	11111		0.01	0-19	0°28 0°60 0°03	0°19 0°22	0°06 0°07 0°55	0°54 0°79 0°35	0.68	
	Khoolna	Satkhira Bagirhat Khoolna Nakipur Rampal		11111	1°31 0°17 0°21	0.02	11111	1		1111	0°38 1'18	0.527	111111	0.18	0.35	0°38 1°18 1°20 0°10	0°42 0°59 0°35 0°19 1°21	0°84 0°88 0°15 0°50	0°21 0°19 0°17 0°27	0.27	
	Jessore	Narail Jessore Jheuidah Magoorah Bongoug	0°45 0°42 	0"i6	1'45		1 <sup>-</sup> 21	0.15		0.07	0°04	1111	13111	0°11	0.48	0°18 1°22 0°85 0°25	0.08 0.02 0.02	0°22 0°36 0;25	0.07 0.04 0.17 0.15	11111	
	Moorshedabad	Kandi Berhampore Laibagh Azimgunge Jungipore Laigoia Jingunge Akhriganj Patkabari	0.22	0°30 0°08 0°06 0°28 0°54	0°28 1°12 0°16 	0°03 0°45 1°22		0°24 0°53 1°50	1111111	111111111111111111111111111111111111111	0°07 0°15	0.85				0.69	0°07 0°25 0°09 0°70 1°15	0°17 0°42 0°81 0°20 0°70 0°10	0°10 0°06 0°25	0.30	
ART BENGAL	Chittagong	Cox's Bazar Chittagong Kutabdia	0°40 0°95 1°03 0°40	2°20 0°22 2°94 0°50	0'34	0.90	0.03	0*22	0°04 2°82 0°80 2°05	0'46	0.08 0.12 0.08	0:40	:::::::::::::::::::::::::::::::::::::::	0.75	2:51 0:05 0:06 0:04	3°24 3°52 6'97 1'66	0.80	0°10 0°07 0°40	0.56	0.09	
	Chittagong Hill Tracts.	Rangamati Rums	0°41 0°30	0.07			0.34	1.21	6°90 2°50		0.02	0.15	1.80	0°43 1°75	0.57	0.39	0.81			0.02	

## Bengal in September 1890.

20	28	24	25	26	27	28	29	30	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the mouth,	Heaviest rainfall during the month,	Foral rainfall from 1st January 1890 up to 30th September 1890.	Average rainfall from 1st January up to 30th September.	Station.	District.	Meteorological division.
1°09 1°10 1°42 1°46 1°12 1°70 1°57	0°68 0°68 0°68 0°49 3°30 0°56 2°57	6°18 1°75 1°40 3°19 3°50 0°72 1°13	4°26 1°54 0°78 2°65 2°11 0°65 0°90	0.22 0.65 0.56 1.59 	0.47 2.55	0°71 1°75 0°27 2°11 0°14 0°18	0°11 0°56 1°23 0°12 0°13	0.63 0.24 0.31	20 21 22 20 15	17.5 18.4 18.3 15.6 9	16°80 13°23 18°52 15°71 15°98 7°50 11°76	9°95 10°36 9°77 11°14 P	6°18 2°93 3°04 3°19 3°50 1°45 2°57	57°19 61°18 58°16 52°46 31°62	43'80 50'38 44'47 56'25 ? ?	Proree Khurdah, Banpur, False Point, Gop. Satpara, Pipli,	Pooree	ORISSA.
70 58 40 08 90 90	1°00 0°74 2°10 0°35 1°70 2°75 2°60	4°20 2°20 3°d0 4°05 1°50 1°00 1°72	1'60 1'12 4'53 1'72 2'59 1'35 1'63	0°80 0°48 2°40 1°44 0°75	0°08	1'40  2'17  1'25	1'41  0'79 	0°19 0°13 0°03 0°35	20 16 17 19 17 16 11	11'9 21'4 18'6 13'4 12'8	17:83 13:99 21:02 16:55 15:01 12:19 11:85	8.61 9.54 9.70 9.14 9.94	4°20 3 55 4°53 4°05 2°59 2°90 2°60	55'39 58'61 74'67 45'96 48'65 50'23 45'45	48:75 46:86 51:08 49:73 53:42 P	Jagatsingpore Banki, Cuttack, Kendrapara, Jajpore, Dharmsala, Salipore,	Cuttack.	
0°10 0°50 0°40 1°34 1°10 0°56	0:32 0:60 3:50 2:48 1:50 2:05	2'45 1'90 1'55 3'54 4'07 7'72	3°10 1°70 2°30 4°82 3°57 1°56	0°50 0°14 0°15 4°19 3°20 1°90	1:35 0:45 0:43 0:27 0:68 0:05	0.10 0.20 0.20 0.10	0°15 4°00 0°02 0°25	0.07 0.04 0.36 0.36	17 17 20 18 15 16	14'1 14'2 13'6 16'1 12'9 16'3	13:74 14:47 19:07 22:89 22:05 18:30	11'04 10'50 11'13 12'63 10'48 11'77	3°10 2°40 4°00 4°82 4°07 7°72	44.98 50.58 57.00 61.74 59.37 57.20	50°60 52°74 50°66 58°84 53°42 55°33	Chandbali Bhuddruck. Sorah. Balasore. Jellasore. Baripodah.	Balasore,	
1°28 0°10 0°10 0°40 1°04 0°41	1°19 1°57 0°30 0°52 1°31 1°14 0°44	2°50 2°90 1°80 1°66 1°10 2°26 1°48	2:41 0:83 0:70 1:00 0:35 1:04 0:07	3°13 3°45 2°10 0°31 6°80 0°40 1°32	0°57 0°50 0°70 0°52 2°05 1°56 0°97	0°79 0°16 3°30 0°12 0°07 1°21	0.66 0.58 0.80 0.66 1.32 3.26 3.25	0.32 0.33	17 14 17 16 15 15	14°3 16°8 9°2 15°0 14°7 F	15°11 12°52 12°20 7°80 9°95 13°71 9°03	11'74 12'56 8'33 8'19 8'98 9	3°13 3°45 3°35 1°66 2°05 3°26 3°25	48°25 46°88 52°20 44°44 45°04 41°61 47°84	59:48 64:05 53:81 54:06 58:41 P 52:91	Contai Saugor Island Tumlook. Midmspore. Ghatal. Kukrahaty. Garbeta.	Midnapore	SOUTH-WEST BENGAL.
1:22	0.72	1.32	0.06	2:54	0.91	1.18	1.32	0.02	16	16.7	12:34	11.01	2:54	59.74	60'98	bour.	24-Pergumahs	
0'74 0'60 0'43 0'13	0°84 0°57 0°52 0°98 0°22	0°45 0°10 0°12 0°16 0°26	0.01 0.02 0.22	0.75 0.18 0.16 0.17 1.19	1.27 4.60 2.37 8.29 2.47 0.42	0°51 2°09 1°13 1°16	0°70 2°70 2°40 2°30 0°63 0°29	0°01 0°27 0°08 	18 17 10 13 15 11	18°5 13°3 16°4 15°7 14°5	7:18 12:42 9:18 11:77 9:69 5:31	9:90 7:44 8:79 9:02 8:70	1.27 4.60 2.57 3.29 2.47 1.28	53:75 55:14 45:40 46:09 45:91 54:78	58°25 51°81 55°12 53°79 57°62	Canning Town. Alip re Jail, Barrackpore. Dum.Dum. Baraset. Buseerhat.		
0°46 0°11	1·21 0·33	0.08 0.12	0.05	0.03 1.67	2.90 1.61	0°92 2°44	3°21 1°77	0.58 0.08	16 15	18'7 15'1	9°95 10 01	9:10 8:83	3°21 2°44	46:16 55:21	56°55 55°98	Howrah Molfesreka (Oolooberiah)	Howrah.	
0°71 0°88 0°03	0°89 0°30 0°24	0.08 0.83 0.51	0.06	0.522 0.00 0.10	1:20 1:22 2:04	4.05 3.58 0.03	1°95 1°95 0°86	0.08 0.08 0.09	14 16 14	17.8 15.5 14.6	10°53 12°53 4°38	7:90 7:63 9:62	4.05 3.58 2.04	48°63 47°76 51°39	58'52 55'19 57'93	Serampore Hooghly. Jehanabad.	Hooghly,	
0°43 1°12 1°90 1°08 0°07	0:40 0:87 2:18 1:50	0'56 0'34 0'04 0'53 0'88	0°10 1°30 0°05 0°11	0.63 0.31 2.50 0.22 0.05	0°22 1°40 0°33 1°43 0°48	2:35 0:06 4:10 0:35 0:36	1'10 1'56 0'07 0'34 1'09	0.03	13 16 13 15 10	10'6 16'4 18'4 14'9	10°91 11°00 14°04 8°03 4°89	6'54 8'26 8'20 7'14	3°15 3°40 4°10 2°13 1°50	53'55 63'83 59'78 53'35 46'31	48°82 52°05 51°34 50°09 P	Cuina Burdwan. Cutwa. Raneegunge. Mankur.	Burdwan.	
1°51 0°50 0°12 0°05 0°05  0°55 6°28	1'28 0'19 3'37 1'10 0'85 0'38 1'00 2'98 0'82 3'28	1.22 1.89 0.23 9.85 0.41 1.00 2.05 1.69 1.35 0.72	0.08 0.24 0.28 0.56 0.45 0.12 1.00  0.45 0.35	0°40 1°69 0°11 0°51 0°04 0°78 0°80 0°72 0°12 0°52	1'48 0'76 1'82 1'12 1'46 0'55 1'24 1'37 2'05 0'46	0.04 0.06 0.19 0.29  1.40 0.12 0.12 0.74	1'23 2'34 0'10 0'20 2'22 2'05  0'44 0'57 1'37	0°36 0°06 0°16 0°15 	15 13 13 13 13 12 12 9 10 15 11	15'9 14'4 11'9 13'8 P	11'28 9'90 7'63 7'06 6'89 6'63 11'18 10'49 9'15 9'15	8.56 9.17 6.62 9.43 9 9 9 9	1.51 2.34 3.37 1.40 2.28 2.05 3.13 2.98 2.05 3.28	55°25 48°45 54°64 35°04 56°21 63°85 46°81 61°53 48°63 49°88	51°87 54°67 49°71 54°71 9 9 9 9 9 9	Bankoora Bishenpore, Maliara, Khatra, Indas, Kotalpore, Anda, Gangajalghati. Raipore, Sonamukhi.	Bankoora.	
0°05 2°42 1°28 2°35	1.19 2.00 1.12 3.33	1.68 0.84 0.33 0.46 1.10	0.09 0.18 0.50 	0°94 0°82 0°69 0°29 1°60	2·29 2·23 2·44 2·02 0·85	0'40 0'43 1'18 0'26	0°20 1°07 2°70 1°80	1°58 0°17 0°18 	16 15 13 12 6	17'4 14'5 15'2 9	8:57 11:58 12:89 10:25 7:00	9:77 10:32 11:23 1	2°29 2°95 2°70 2°31 2°85	57'44 58'66 65'30 54'76 52'98	51:97 55:05 52:39 9	Bh. Soory Hetampore, Rampore Haut, Bolpur, Murarai,	Beerbhoom.	
0°13 0°05 0°40	0°17 2°46 0°85 2°46 1°85	0°42 0°69 0°28  0°08	0°12 0°88 0°09	0°24 0°14 0°07 0°67 0°14	1°12 0°14 0°40 0°20	1°85 2°85 3°40 2°15	1'93 2'31 2'25 3'58 2'22	0°16 0°05 0°08 0°04	16 15 12 7 14	12°1 14°1 13°7 13°2 14°6	11.03 8.08 9.06 10.12	6.95 7.84 9.84 7.92 9.96	1.98 2.85 3.40 3.58 2.22	50°71 55°49 42°74 48°36 51°42	51'01 50'57 55'87 52'39 56'58	Rangahat Kishnaghar. Choodanga, Meherpore, Kooshtea,	Nuddes.	
0.00	0°16 0°13 1°05 0°68 0°43	0°69 1°72 0°37 0°67 2°83	0.09 0.60 0.84 0.21	0°45 0°38 0°21 2°48 1°02	2.61 0.90 0.45 1.19 0.87	:::::	0.08	0.02	16 11 10 11 12	16.4 13.4 15.4 P	6'82 5'66 4'86 9'03 8'38	8.71 9.70 9.58 9	2:61 1:72 1:13 2:48 2:83	56°93 60°57 50°01 64°05 57°28	59°30 63°93 60°02 9 P	Satkhira Bagirhat, Khoolna, Nakipur, Rampal,	Khoolne.	
0°09 0°60 1°55 0°95 0°20	0°33 2°30 6°26 0°17	0.07 0.18  0.45	0.03	0°13 0°71 0°09 0°85	0°15 0°22 0°19 0°95	0.02 0.02 0.02 1.10	0°84 1°09 2°14 0°57 1°00	0 iii	11 13 10 10 10 13	13°4 18°1 14°0 10°8	1'83 6'09 7'13 2'48 7'86	7*08 9*20 8*71 7*99 8*34	0°64 2°80 2°14 0°85 1°45	47:90 58:52 53:14 45:20 42:13	51.08 61.19 56.92 55.52 53.73	Narail Jessore. Jhenidah. Magoorah. Bongong.	Jessare.	
0'00 1'00 0'70 0'55 0'62	1.05 9.60 9.65 1.25 0.21 0.15	1.05 0.52 0.68 0.56 0.45	0°17 0°18 0°45 0°65 0°50 0°42	0.52 0.34 0.22 0.80 0.30 0.50	0'79 0'98 0'57 0'59 1'05 2'20	1.78 0.74 0.78 1.10 1.02 1.45	4°35 2°57 3°13 2°08 1°55 1°30	0°20 0°69 0°38 0°20 0°45	11 15 15 18 15 16	14°6 15°1 14°1 15°3 14°5 14°5	12.67 8.52 9.66 9.93 7.53 10.78	8.87 9.63 10.12 9.58 10.64 9.71	4'85 2 57 8'13 2'08 1'55 2'20	62'48 53'59 56'74 52'81 45'75 60'44	50°90 40°74 50°47 50°05 49°73 50°35	Kandi Berhampore. Lalbago. Azingunge. Jungipore. Lalgola.	Moorshedabad.	
1760	0.50	0.17	0.20	0.11	1.60 1.50	1°33 3°00	1.65	0.20	11 11	9-9-9	10.00	9 9	2.40 3.40	55.58	9 9	Jaigunge. Akhrigunj. Patkabari.	1	
018	0°33 0°35 0°35 1°15	0.32 0.38 0.38 0.30		1111	0.04 0.03 1.74 0.37	0.10	1111	1111	17 17 12 17	17'2 18'4 9	11.79 11.01 15.54 10.61	14.71 13.75 9 9	3:24 3:53 5:97 2:05	181°19 111°61 111°47 84°31	133°16 97°45 P	Cox's Bazar Chittagong, Kutubdia. Satkanya,	Chittagons	EAST BREAK.
144		=	1.20	0.30	0.27	77	***		17 8	19.9	7:92 10:70	15.26	1.27 2.20	78°25 80°65	86.84 78.12	Rangamati Ruma,	Hill Tracts.	

Table of Rainfall recorded at Stat

Meteorological division.	District.	Station.	1	2	8	•	5	6	7	8	9	10	11	12	18	14	15	16	17	18	1
		Det. Malle			0110				0105			1	1.63				0.48	0.12		1.00	0.5
East BENGAL -concld.	Backergunge	Patuakhally Perozepore Burrisal Bhola Gournaddi	0.15	0.81	0.12	0.03		::	0°25  0°13	0°27 0°24 0°12	0°23 0°29 	0.17	0°30 0°17 	0.16		0.15	0.42 0.82 0.65 0.40 0.60	0°80 0°54 0°50 	0°13 0°03	0°70 0°05 1'45	01
	Noakholly	Noakholly Fenny Harishpore		0°12 0°15 4°90	0°11	0.62 0.92 2.20	0.03	0.50	3.09 3.40 1.90	0.80 0.10 0.03	0.05	0°80 1°75	0.15 0.90	0.15 0.25 0.20	o'i?	0°16 0°54 0°80 0°10	0°87 0°10 0°25			0°58 0°36 0°35	670
	Furreedpore	Madaripore Furreedpore Goalundo	0.20	::			:::	111	::	0.27	0.25	0.05	0.91		0.15	1.02	0°22 1°24	0.81	0.03	0°18	1 1 1 1
	Dacca	Munshigunge Dacca Naraingunge Manickgunge	1:20 0:16 	:::	1111	0'29	1111		0.04	0.07	1111	0.04 0.11 0.56 0.40	0.36 0.35	0.35	0.07 0.04	0.60 0.16 1.29 0.34	0°10 6°26 0°24 1°77 1°02	0.11 0.20 0.36 0.16 0.01		1111	03
	erit Timperah	Joydebpore Agartola	0.029	0.05	***		7	0.10	1'30	1.40	"	0.40	1.82		1.22		0.42	0.28	0.25		0.4
	Hill Tipperah Tipperah	Comilla	0.19	***		0.03			0.10				0.82			0.80	0.17			0.09	14
		Chandpore Brahmunberia Ramchandra- pore.	0°60 0°07	0.04	:	Ξ	=		=	0.30	0.60		0°20 0°34 0°78	0.08	0.15	1°10 0°05 2°05	1.80 0.26	0.42	0.08	0.18	000
		Nasirnagar Daudkandi Kasba Laksham	0.75 0.78			-		=				0.02		1.52	0.02 0.02	0.29					111
	Mymensingh	Kishoregunge Atia (Tangail) Mymensingh Jamalpore Netrokona Subornakhally Durgapore Sherpore Town Dewanganj	0.70 0.02 1.28 0.84 	1.02 0.99 2.05 2.02 0.85 *1.29	0°43 0°28 	0.99	0°07 0°47 0°19 0°06	0.43  0.15 0.70 0.05	0.08	0°35 0°13 0°03	0.42 0.62	0°69 2°10 0°80	0°54 0°10 1°81 1°10 1°35 0°28 0°47	0°34 0°15 0°02 0°19  0°23 	8.74 0.17  0.41	0°65 0°02  0°30	8'05 0'03 0'12 0'48 0'25	0 39 0 09 0 56 1 50		11111111	070 071 072 073
NORTH BENGAL	Pubna	Pubna	0.18	2.66			0.23		0.52	0.02	0.14	0.67	0.28		0.37	0.74	0.08	0.03		,	1 1
	Sogra	Sherpore Nowkhilla Bogra	0°44 0°27 0°45	2°15 2°43 1°25	0'04	-	0.13 0.08 0.08	::	1.27	0°65 1°09	0°42 0°74 0°12	0°49 0°57 0°68 ,0°71	2.60 0.70	0°16 0°22	0.39 0.39	0.12	0°23	0.53	111	111	1 1111
	Rajshahye	Panchbibi  Beauleah  Nattore  Lalpore  Manda	0.35	0.98 0.70 0.36	0°17  1°11	0.94	0.20	0.95	0.30	0.03	0°24 2°10 0°37 0°10	0.19 0.10 0.19	0.55 0.66 0.66	 0°10	0.66		0°19 0°36 0°88 0°33 0°19	0°14 0°65 0°18		111111	THE PERSON
	Maidab	Maldah Chauchal Gajol Sibganj	:::::::::::::::::::::::::::::::::::::::				0.04			0.07 0.38	0.08	1.52 2.00 3.00 0.48	0°64 0°47 0°20				0°30 0°22 1°85 0°25	0.22 0.26 0.18		111	1111
	Dinagepore	Mohadebpore Churamon Raigunge Dinagepore Baloorguat Thakuryaon		0.86		0-24	0°25 0°45	0.03 0.03			0.33	8.72 2.10 1.13 1.76 0.71	0°12 0°15	0'80 1'21 2'21	0'18	0:29 0:07  1:16	0°31 1°02 0°25 0°23 0°09 1°45	0°25 0°12 0°62 0°11		111111	078
	Rungpore	Bhawanigunge (Gyabanda). Rungpore Kurigram Bagdogra (Nilphamari).	1°30 0°02 0°09 0°71	0°22 0°32 0°19 0°33	0°52 0°14 0°21 	0.81 3.90 0.68 0.68	0°52 1°95 2°60 2°25	0°15	0.13	2.01	0°10 1°75 0°64	0°20 0°52 0°63 0°87 1°25	0.08 0.13	0°41 0°46 1°26 0°30		0'12	1.87 0.13 0.25	0°20 0°04 	-		1 11 1
	Julpigoree	Julpigoree Alipore Doar Falacotta Debiganj Bhogotpore	0'81 2'41 2'65 0'53 3'01	1'84 8'91 4'78 0'50 2'41	2:41 3:00 5:15 0:12 2:88	0°67 1°85 0°43 0°84 0°75	0.24 0.26 0.21	0.01	0.06 0.21 0.12 0.25	0.34	1'56 0'07	3'94 2'81 1'04 0'75 3'66	0.32	1°58 0°44 0°57 1°12 3°25	1.80	0.78	0.18 0.68	0°13 0°23 0°58 0°55 0°55		-	0 % 5 % 5 % 11 %
	Cooch Behar	(Nagrakatta). Dinhatta Cooch Behar Mickilgunge Matabhanga	0°76 5°20 2°66 3°20	0°66 2'69 0°52 1°62	1°71 1°66 0°55 0°55	7'68 1'80 0'38 1'09	0.21 1.60 0.02 0.13	1.23 0.10 0.76	0°64 0°47	0.68	0°69 2°84 	1'02 2'04 2'07 1'65	1:11 1:36 0:75 1:32	0°97 0°95 0°53 3°05	0°03 0°20 	0.08	0°12 0°88 0°08	0.02 0.10 0.10		111	038
	Darjeeling Hill	Buxa Siliguri Darjeeling Kalimpong Kurseong	1:77 1:38 0:34 2:05 0:14	3'61 0'88 0'06	2°28 5°37 0°74 0°88 1°14	3:34 1:04 0:01 0:06 0:14	0°05 0°05 0°38 0°30 0°44	1°26 0°65 0°67	0°74 0°74 0°11 1°46	0.03	0°90 0°18 0°60 1°70	1.27 6.99 0.78 0.66 1.70	1.00 0.10 0.28 0.28 0.28	1:08 0:86 0:15 0:06 0:53	0°01 0°04 1°35 0°68 0°14	0°48 0°04 0°05	0.52 2.08 0.04 0.08 1.12	0°07 0°03 0°86 0°57 0°22	1 : - 1	11111	40 13 00 07
North Benai	Purneah	Kissengunge Arrareah Purneah Gondwara Balarampore		0.36 0.38			0°54 1°59 0°02	1°17 0°43 0°29	1111		0°26 0°45	0.73 2.66 10.32 2.80	:: ::		0°28	6.08	0.65 0.30 0.78	1°27 0°04			0-20
		Matiari Kaliaganj	1°40 0°48	2.40	0.64	2°02 0°80	0.51	0.38	0.81	0°15	0'41	4°40 4°00	0.04	0'40 1'92	1.56	6.08	0.78	0.30	::	0.30	1
	North Bhagul-	Maddapore	4.	***							0.25	0.07						0.43	=	17	1 1 1

Bengal in September 1890	-continued.
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	22	23	24	25	26	27	28	29	30	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 1st January 1890 up to 30th Sept. 1890.	Average rainfall from 1st January up to 3uth September.	District.	Station.	Meteorological division.
	0.90 0.38 0.18 0.28	0°50 0°18 1°60 0°57 2°65 2°00	2'50 1'12 0'75 0'90 0'56 2'40	0°25 0°45 	0°85 0°10 0°92 0°20 0°25	0.22 2.62 0.60 0.25	0°19 0°05			13 15 13 12 8 10	16'9 15'0 20'2 19'4	8·25 7·17 7·43 4·51 4·50 8·62	12:85 11:15 11:44 11:81 9	2.50 2.62 1.60 0.90 2.65 2.40	74*18 60*60 65*17 66*72 46*57 66*63	89°09 71°75 73°16 83°87 P	Patuakhally Perozepore. Burrisal. Bhoia. Gournaddi. Bauphal.	Backergunge,	EAST BENGAL-concid
78	1111	1°24 0°25 1°75 0°40	0.20 0.30 0.30		 0°35	1°55 0°35		0.12	:::	17 13 18 7	19°9 17°4 P	12.98 9.16 21.30 3.97	16.35 16.01 5 5	3°78 8°40 4°90 1°50	94°94 107°08 166°52 69°45	102.28 111.41 102.28	Noakholly Fenny. Harishpore. Ramganj.	Nonkholly,	
17	0°50 0°25	0.08	0.15 0.31	0°32 0°75 0°51	0.28 0.02 0.38	0.00	0.25	0.84		7 14 10	13.7 14.6 13.1	2.08 4.04 6.17	8:30 8:30 8:30	0°50 1°02 1°24	43°12 51°63 50°07	68'03 64'03 57'92	Madaripore Furreedpore, Goalundo.	Furreedpore.	
50	 0°12	0.60 0.21 0.54 1.35 0.28	 0.45 0.21		0.55	0°25 0°14 0°18 0°29 0°58	0.12	0.23	0.87	8 8 9 12 17	14.7 14.7 15.1 13.8 F	3·43 1·98 1·99 6·87 8·02	12:20 9:95 9:30 7:88 9	1.20 0.50 0.54 1.77 1.40	63°00 65°15 67°64 62°56 72°98	78'91 67'08 69'31 57'53 ?	Munshigunge. Dacca. Naraingunge. Manickgunge Joydebpore.	Dacca,	
	***	1.86	0.40		0.10	0.42				18	15'8	8'32	10'15	1.86	72'24	72.85	Agartola	Hill Tipperah	
	0°07 0°20 0°60 1°06	0°96 0°30 0°74	0°87 	0.70	0.50	0°22 0°60 0°80 0°21	0.02		:::	13 9 8 14	17'8 16'4 15'0	4'84 4'52 4'92 5'87	11'43 11'80 11'61 ?	0°96 1°10 1°90 2°05	66:69 62:19 63:65 77:52	85.90 80.85 74.10	Comilla Chandpore. Brahmunberia, Ramchandra. pore.	Tipperah.	
	0.20	0.75		82.0		0.20 0.12				5 7 3 3	9 9	2.85 2.90 0.62 3.63	9 9	1°20 0°75 0°50 1°65	62.61 30.65 60.38 77.38	9	Nasirnagar. Daudkandi. Kasba. Laksham.		
1 125	0°05  0°17 1°10 0°37	0°90  0°22 	  648 		0.25	0°43 1°11 0°54 0°54 1°10  1°08 2°42	0°18 0°35 3°92 1°00 2°94 2°35 1°81 6°30	0.60 2.35 2.00 5.10 0.30 6.55  4.94		14 6 18 11 15 12 11 13 5	16'4 11'3 18'7 15'6 17'4 ?	7'98 4'87 9'86 14'10 10'60 16'80 12'45 12'58 9'94	12:24 9:47 14:03 13:70 13:68 9	3.05 2.35 3.74 5.10 2.05 6.55 2.35 4.94 6.30	75'60 58'03 82'69 82'51 97'48 60'71 121'42 73'52 70'82	77'44 68'79 86'46 70'46 87'93 ? ? ?	Kishoregunge. Atia (Tangail). Mymensingh. Jamalpore. Netrokona. Subornakhally. Durgapore. Sherepore Town Dewanganj.	Mymensingh.	
	1'04	0.68	0'46	1'54	0'14	0.51	0.79 2.32	2°51 7°14	0.02	14 15	15'5	8.85 15.93	11*06 9*48	2°51 7°14	56.68 67.07	59:19	Pubna Serajgunge.	Pubna	NORTH BENGAL.
70	0°38 0°28	0°27 0°13 0°03 0°05		0.27	0712	0°48 0°34 0°82 8°50	3°10 1°33 8°55 3 50	5·90 4·57 8·94 2·34	0.03	16 13 16 18	12°2 14°7 14°6 11°3	17.59 11.50 18.44 18.46	9°94 9°42 11°76 10°41	5°90 4°57 8°94 4°50	71·19 77·24 72·62 75·47	59°39 56°53 69°28 56°26	Sherpore Nowkhilla. Boxra. Panchblbi.	Bogra.	
1881	0°88 0°05 0°11	0°46 1°08 0°43 0°53 0°10	0°01 1°80 0°42	0.81	0°54 1°70	2.26 2.88 5.00	1.85 5.70 5.08 4.00 1.85	2·17 5·05 2·15	11111	14 13 12 13 9	15-7 12-3 13-3 9	10°82 20°82 13°85 11°28 6°55	10 85 11 73 12 83	2°26 5°70 5°08 4°00 2°00	64.61 86.08 60.30 49.76 37.26	53'32 57'61 54'84	Beauleah Nattore, Naogaon, Lalpore, Manda,	Rajshahye.	
100	0:20 0:90 0:11	1'35 1'42 1'30	0.45	0.04	1111	3°45 3°00 6°35 1°26	5'05 4'60 0'84 2'40	1°25 0°05 0°15 1'82	0.02	13 10 9 11	14.6 15.0 P	14.43 11.47 14.39 7.78	10°78 10°25 ? ?	5°05 4'60 6'35 2'40	59°99 54°47 72°13 51°41	49°06 55°33 9	Maldah Chanchal. Gajol. Sibganj.	Maldah,	
77	0°30 0°84 0°70 0°45 1°64	0°04		111111	111111	7.80 4.12 5.95 2.93 7.62 1.57	8.80 6.22 6.25 6.44 6.85 7.57	0°42 1°00 0°11	11::11	7 8 7 15 10 13	12.2 13.6 13.0 12.8 13.3	18°02 16°44 15°75 14°00 22°87 18°42	11.59 12.91 10.35 12.62 12.25 9	8°80 6°22 6°25 6°44 7°62 7°57	63:26 73:70 81:31 79:23 74:61 99:05	56'86 55'56 58'53 69'50 54'12 ?	Mohadebpore Churamon. Raigunge. Dinagepore. Baloorghat. Thakurgaon.	Dinagepore.	
15 S4 20 S5 W	0.12 0.03 	0°13 0°10 0°15	1 511	7	1111	0°45 1°92 0°53 2°75	7.05 10.40 5.45 8.25	27.00 2.86 0.76 0.21		14 19 17 18	11.5 16.5 17.5 14.6	42°12 23°56 19°07 21°85	11.67 13.06 12.71 14.83	27'00 10'40 5'45 8'25	85'40 87'54 101'04	63.71 78.58 82.07 86.41	Bhawanixuuge (Gyabanda). Rungpore. Kurigram. Bagdogra. (Nilphamari.)	Rungpore.	
	9.05  0.50 1.33	1111		1 11 11	111111	0.92 0.27 0.39 1.20 0.09	3°79 2°75 3°00 5°65 2°20	0°07 0°42		11 19 13 12 19 19	17-2 17-2 P P P	22°55 21°27 30°07 21°70 19°78 37°10	23°59	3'94 8'91 4'78 5'65 11'97	93°16 148°51 185°61 140°39 108°62 177°81	9 122'85 P	Ulipore. Julpigoree Alipore Doar. Falacotta. Debiganj. Bhogotpore	Julpigoree.	
100 100 100 100 100 100 100 100 100 100	0'49 0'21 1'21	1111	# # # # # # # # # # # # # # # # # # #	:::		0°87 0°62 0°42	5°21 3°66 4°63 3°56	0°42 0°06 0°59	1111	19 17 16 21	16:1 16:8 15:7 17:1	26.37 29.86 19.90 26.01	21.20 21.48 22.89 22.74	7.68 5.20 4.75 3.55	193'42 170'86 145'68 171'28	105:86 124'14 118'40 118'92	(Nagrakatta.) Dinhatta Coogh Behar Mickligunge. Matabhauga.	Cooch Behar.	
56 W 56 W 78	0.58 0.63 0.08 0.28	0.10	1111	11111	11111	0.05 0.76 0.18 0.10 0.08	1.68 3.90 6.67 4.22 5.75	0°56 0°28 1°95 1°28 2°35	0.04	23 19 24 20 25	21.0 18.7 22.1 18.1 9	27.54 30.62 16.09 15.25 28.16	31°85 16'89 17'43 11'07	4*01 6*99 6*67 4*22 5*75	202'96 172'91 147'24 116'78 187'45	909:24 113:70 114:08 89:40 P	Buxa Siliguri. Darjeeling. Kaimpong. Kurseong.	Darjeeling.	
48 10 30 20	0°33 0°11  1°60	111111	111111		1.30	1°95 2°31 2°35 6°35	5°10 2°50 4°67 3°15	0.82 0.20 0.50	111	10 11 11 7	14°1 12°5 14°5 ?	16:21 16:63 20:90 14:46	13°79 13°28 13°47 9	5°10 4°48 4°67 6°35	97°29 79°88 78°49 90°68	71°39 64°88 60°17 P	Kissengunge Arrareah. Purneah. Gondwara. Halarampore	Purnesh	NOBTH BEGAR.
11 11	1.00	-	111		1111	1.00 0.82 0.33 5.36	3'44 5'25 5'00	0.08		19 3 7 5	11°2 12°4	\$4*69 7*37 9*36 8*00	10°24 0°40	4°00 5°25 5°09 3°35	117'85 59'74 63'60 48'56	9 9 40°25 47°71	Matiart. Kaliaganj. Maddapore Soopool. Protabganj.	North Bhagul-	

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	٠	5	6	7	8	9	10	n	12	13	14	15	16	17	18	19
NORTH BEHAR —concid.	Durbhunga	Tajpore Durbhunga Madhubani Bahera Roshera		0.30		:::::::::::::::::::::::::::::::::::::::					0.98			6.40		0°06 0°70 0°10	0°04 0°15 0°60	0°70 0°05 	0°48 0°14 	11:11	
	Mozufferpore	Sitamarhi Mozufferpore Hajipore Paru Mahua Sinhar	0.28	::				111111	0'20	:::::::::::::::::::::::::::::::::::::::	0.08 0.28 0.34	1 + 1 : 1 : 1		0.27		0°35 0°47	0.47 0.06 0.15 0.47 2.05	0°14 1°24 0°50 0°35 0°35 0°40	0°42 1°14 1°29 0°15 0°09		
	Chumparun	Motihari Bettiah Bagaha Burhurwa	0.45	0'04	::			::		::		4 : : :	0°49 1°70			1.08 1.02 1.05	1.26 0.45 5.52 0.06	0°19 1°20 0°78 1°13	0:43 0:68 0:42 1:30	1111	5 5 5 5
	Sarun	Gopalgunge Sewan Chupra		Ξ	::			::		:::		::	::	::	0°19 4'41	0.86	0°81 0°71 0°39	0.15	=		
OUTH BEHAR	Shahabad	Buxar Dehree Bhubooah Sasseram Arrah Mohaniah	0.04	:::::::::::::::::::::::::::::::::::::::					::	:::::::::::::::::::::::::::::::::::::::		1.80				0.30 0.30 0.30	0°26 0°05 0°02	1.70 0.43 2.20 0.65 1.10	0°07  0°08 	1111111	
	Gya	Aurungabad Gya Nowadah Jehanabad Arwal Daudnagar Sheerghati Rajauli Pakri Bara- wan.				***	0.10				11111111		0°21 ::: ::: ::: :::	0°10	0°01  	030	0.79  0.40	0°58 0°30 0°39 0°10 0°33 0°90	0°15 9°53 0°14 0°27  0°45 0°15	1111111111	0
	Patna	Patna Dinapore Behar Barrh Bickram							11111			0°15	016		  0°11	0.03	0°25	0.65 2.95 0.83 1.40 0.84 2.67	0.52 0.22 0.09	0.14	
	Monghyr	Begooserai Monghyr Jamui Gogri Sheikpura									0.45	0°17	::	111111		11111	0.30	0°40 0°67 0°56 0°45	0°39 0°83 0°32 0°63 0 18	11411	
	South Bhagul- pore,	Bhagulpore Banka Kolgong Bongaon		::	::	::	1111	:::		::	0.09	0.06	0°08	=	:	=	0.25	0.65 0.66 0.90	0.06	1111	0
	Southal Pergunnahs.	Rajmehal Godda Pakour Nya Doomka Deeghur Jantara Mohagama Nanihat	111111	6°10 	  o*08 			0.04		0.02		2'41    0'06	0°39 0°75 0°47 0°40	0°69 1°28 0°29	0.05		0°82 0°20 	0°16 9°11 0°65 0°36 0°15 0°15 0°12	0°30 0°13 0°16 0°12	11111111	
URUTIA NAG- PUR.	Hazaribagh	Pachamba (Giridi). Hazaribagh Semtagurah Mahudi Hills Jaomrah Hills Barhi Chatra Karagdeha Ramghar		111111111	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		11 11 11 14 4		0-09			38  0°20 	0°67 0°46  0°38 	0.86    0.15		0.04	0°15 1°00 2°38 1°80 0°75 0°33	0°16 1°31 0°75 0°18 1°20 0°60 0°50 0°10	0°27 0°70 0°24 0°29 0°23 0°42 0°33 1°20	0°0S	
	Loharduggs	Lohardugga Ranchi Palamow Silli Balumat Hoseinabad Garwah	1111111	0.37		111111				0.80	0.40	1111111	0.33	0.62 0.55  0.02 	1111111	0.03 0.03	0°88 0°07 0°30 0°70	0°50 2°05 0°17 0°60 0°02 	0.85 0.23 0.06 1.80	0.02	
	Ningbhoom	Chyebassa Chakradhar- pore. Ghatsila	0.30	0.02 0.03	0*84	0.10	0.19	0.50		e-82	0.03	0.02	0.51	0.02	0.30	0.05 0.20	0.30	1°04 0°15 0°30	0.13	0.07	0
	Manbhoom	Baharagura Purulia Gobindpore	0.02	=	0.03	1		11 11	1 :	0.07		11	0.07 0.66	0°23 0°67		0.12	0:41	0°33 1°74 0°92	0.24	0 14 0 77	1000
		Raghunath- pore. Barrabhoom Jhalda			0.78			11	0.00		0.04		1.75 0.23		1	-	0.22 0.80 0.20	0.50 0.71	0°34 0 19		

ngal for the month of September 1890—concluded.

22	23	24	25	26	27	28	29	30	Number of rainy days.	Average number of rainy days.	Total rainfall for the month,	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from lat January 1890 up to 50th September 1899.	Average rainfall from 1st January up to 30th September,	Station.	District.	Meteorological division.
0.30 0.15 0.02	0.08		0°08  0°97	0°54 0°08  1°95	1°24 0°77 0°17 0°76 2°60	4°26 3°02 2°21 5°60 0°36	0°22 0'69 0'28 0 30	T. 1 MARIE	9 9 6 6 9	10:4 11:1 10:5	8°45 5°10 4°27 7°33 7°83	8:00 9:33 9:90 P	4.26 3.02 2.21 5.60 2.60	51.98 57.48 63.01 51.51 50.04	42°10 44°88 45°27 P	Tajpore Durbhunga, Madhubani. Bahera. Roshera,	Durbhungs	NORTH BEHAR -
1°25 0°32 0°60  0°10 1°10	0.02		0.04	0.03 0.08 0.09 2.68 1.20 0.20	0°22 1°42 1°54 1°57 1°60 1°10	3·55 2·48 2·20 3·70 0·17 3·70 2·76	0°40 0°72 0°32 1°00 0°20	0 80	9 10 11 9 8 10 4	9'5 11'0 11'4 ? ?	7:30 5:96 8:29 13:93 5:00 9:75 4:35	9°25 8°23 7°10 ?	8*55 2*48, 2*20 8*70 1*60 3*70 2*76	52°35 55°33 48°81 66°01 45°73 50°88 50°18	42.78 40.96 40.20 9 P P	Sitamarhi Mozufferpore. Hajipore. Paru. Mahua. Siuhar. Pupri.	Mozufferpore.	
0°89 0°45 0°45 0°88	::	:::::::::::::::::::::::::::::::::::::::	::	 0'10	0.74 0.60 1.03	4·12 1·68 2·93	0°26  0°11		8 10	9°3 9°7 ?	10°66 7°49 9°18	8'69 9'32 P	4·12 1·68 2·93	66°93 60°98 57°93	44:47 47:65 9	Motihari Bettinh. Bagaha. Burhurwa.	Chumparun.	
0°58 0°23		0.00	0.12	0°45 2°20 2°39	2:43 1:40 1:94	1.99 0.45 0.17	0.03		8 11 9	9.8 11.8 9.1	7:39 11:61 5:54	7:36 8:83 7:21	2:43 4:41 2:39	51'89 59'46 47'40	41.76 41.59 36.92	Gopalgunge Sewan. Chuprah,	Sarun,	
2°73 1°05 1°10 0°82 	0°29 0°81 0°45 0°47 1°62	0°15 0°10 0°20 0°21	0 30 0 07 0 20 0 40	0°19 0°70 0°22 0°27 2°00	2.64 2.33 2.45 3.29 2.10 1.00	0.44 0.43 0.20 0.32 1.16	0.55 0.09 0.12 0.28 0.19	0.08	8 10 12 11 12 7	12.6 12.1 10.3 12.1 12.2	8-46 5-26 7-91 6-70 8-92 6-60	7:43 7:37 6:70 6:95 8:35	2·73 2·83 2·45 3·29 2·10 2·00	51'42 43'16 41'25 44'39 63'90 36'30	35°85 38°84 39°12 88°35 41°66	Buxar Dehree, Bhubooah, Sasseram, Arrah, Mohaniah,	Shahabad	SOUTH BREAK.
0.25	0°18  0°21 0°40 0°30 0°60 	0.41 0.08 0.38 0.30 1.20 0.15	0°16 0°18  0°80 0°80	0°20 0°02 0°45 0°04 0°30 0°20 0°12 0°14	2:16 2:96 2:04 2:68 3:10 1:00 1:05 0:30 0:35	0°27 2°09 0°72 2°40 1°00 1°11 1°40 2°00	0°04 0°18 0°09 0°15  0°20	0°06 0°10  0°90	10 7 9 9 7 8 8 8 5	9.0 12.4 9.4 8.6 9	5-03 6-02 3-80 4-57 6-60 4-70 4-01 3-48 3-69	7°15 7°15 6°84 5°72 P P	2°16 2°96 2°04 2°68 3°10 1°20 1°11 1°40 2°00	59°84 60°94	40°92 88°92 39°39 38°13 ? ?	Aurungabad Gya. Nowadah. Jehinabad. Arwal. Daudnagar. Shoerghati. Rajauli. Pakri Bara-	Gya.	
0°18 2°40	0°29 0°28 0°47 0°29	 0°50 0°17	0°15 0°35 0°98 0°10	0°10 0°28 0°55 0°55 0°23	1'14 2'40 0'90 0'70 3'60 1'12	1°51 0°55 8°00 4°00 0°36 2°13	0.22 0.02 0.10 0.30 0.11 0.11	0.07	11 9 11 7 8 9	12.6 10.9 12.0 14.3	4.94 9.54 7.98 7.80 5.63 7.25	7.87 6.62 6.38 7.88 9	1°51 2°95 3°00 4°00 3°60 2°67	51'03 51'53 46'15 43'43 57'92 49'60	38'70 39'18 40'83 38'97 P	Patna Dinapore, Behar, Barrh, Bickram, Hilsa,	Patna.	
0.20 0.16 1.40	0 05 1 60 0 87 	e is	0.20 0.30 0.30 0.30	0°10 0°08 0°19 0°25	0°32 0°24 0°70 0°89 1°30	2.85 2.92 1.27 3.88 2.10	0.02 0.08 0.13 0.22	0.09	11 10 10 7 5	11.1 15.8 10.4 6	5*84 6*80 4*95 7*59 4*13	7°29 8°44 7°29 9	2.85 2.92 1.40 3.88 2.10	43°76 54°17 58°18 74°55 45°79	39.06 41.56 42.45 9 P	Begooserai Moughyr. Jamui. Gogri. Sheikpura.	Monghyr,	
0.07 0.03 0.45	0.28	0.19	0.90	0.03 0.05	1'49 0'38 1'40	3.05 1.66 2.70	0.01 0.02 0.20	0.00	9 12 10	12.8 12.7 P	5.68 3.20 7.89	7-92 8-03 P	3.05 1.66 2.70	57'56 42'10 58'19 72'65	43'46 42'06 P	Bhagulpore Banka. Kolgong. Bangaon.	South Bhagul- pore.	
1°29 0°07 0°07 0°06	0°46 0°78 1°05 0°94 0°84 0°45	0°08 0°52 0°29 0°47 1°76 0°25 0°84	0°10 0°05 0°35 0°17 0°48 0°75 0°12	0.03 0.29 0.24 0.09 0.85 1.07	2:27 0:77 2:65 0:50 1:11 0:72 1:38 0:71	4.75 1.40 1.96 0.94 1.09 0.28 0.15 0.41	0.62 0.68 0.71 0.45 0.38 0.32 0.11	0.06 0.10 0.18 0.44 0.15	6 9 13 14 12 15 9	11'3 11'9 15'5 17'7 14'9 12'3 P	10°61 3°65 10°70 6°80 5°35 5°95 3°21 4°48	11'86 9'53 13'16 10'27 8'54 7'88	4.75 1.40 2.65 1.23 1.11 1.76 1.38 1.11	50°17 47°42 66°08 63°50 46°07 57°60 47°02 29°08	52:37 44:72 57:60 53:25 48:22 48:23	Rajmehal Godda. Pakour. Nya Doomka. Deoghur. Jamtara Mohagama. Nanihat.	Southal Pergunnahs.	
1'10 1'27 0'63 1'90	0°31 0°97 0°29 0°41 0°90 0°60  0°02 1°96	1'49 0'48 0'30 0'12 0'40 0'55 0'17 0'47	0°42 0°37 0°20 1°66 0°50 0°18 0°06 0°20 0°90	0°90 0°85 0°24 0°80 0°80 0°07 0°28	0°80 1°45 1°43 1°20 0°40 0°80 0°77 1°62	0°48 0°74 0°12  0°62 0°70 0°30 0°47	0.02 0.14 0.13 0.50 0.22 0.09	0°85 0°87 0°60 0°16 0°05 2°90	13 12 12 12 12 13 11 9 13 6	16·1 17·8 14·6 12·9 14·7 P	6:74 7:76 7:20 7:02 10:00 4:69 3:56 8:08 9:05	,8.66 7.82 8.04 10.82 P P	1'49 1'50 1'45 2'38 1'90 0'80 0'80 0'77 2'90	52'76 49'28 ,39'54 55'70 48'14 46'98 52'15	47'35 45'96 45'80 58'48 9	Pachamba (Giridi). Hazaribagh. Semtagurah. Mahudi Hills. Jhoomrah Hills Barhi. Chatra. Karagdeha. Eamphar.	Hazaribagh	UMUTIA NAGPUR.
0°18 0°30 1°35 0°50 1°35 0°19	0°88 1°56 0°58 2°60 0°13 2°74	0.03 1.12 0.03 	0.20 0.38 0.03 0.70  0.21	0°40 0°05 0°60 1°12 0°74 0°96	1.30 1.70 0.81  1.25 0.46	0°40 0°19 0°20  8°76	0.08	0°85 0°88 	11 15 13 6 5 7	17.5 16.8 12.8 P	5°93 9°29 3°85 7°80 9°84 5°80	9°16 8°19 7°95 P P	1'30 2'05 0'93 2'60 3'78 2'62	48'96 53'47 44'55 44'73 38'50 42'14 38'96	49'41 46'61 42'36 9	Lohardugga Ranchi. Palamow. Silli. Balumat. Hoseinabad. Garwah.	Lohardugga.	
0.81 0.82 1.12	0°42 0°30 2°10 0°75	0.02 0.22 1.10 1.44	0.08 0.15 0.50 1.45	0.04 0.10 0.00	1:25 0:10 0:03 0:25	0.20	0°07 0°05	0°80 0°08	17 25	16.6 P	7°18 8°47 9°26	8:38 P	1°25 0°30 2°10	34'49 51'25	51.45 F	Chyebassa Chakradhar- pore. Ghatsila.	Singbhoom.	
0.08	1:58 0:78 2:50	0.85 0.85	0°22 0°15	0.06	0°55 0°56	9.02 0.17	0.00		18 16 18	16.3	9.19 5.29 6.39	7 7 80 7 22	1.44 1.74 0.02	54'56 43'64 36'10	46*79 43*04	Baharagura, Purulia Gobindpore.	Manbhoom.	
0°18 1°52 0°05	1.66 2.38 1.20	0°80 1°90 0°70	0.08 0.18 0.14	0.30 0.18 1.00	0.80 0.21 0.33	0.06	0712 	0.02	14 13 9	9 9	5*98 8*82 5*40	9 9	2.20 1.66 2.88 1.50	43°75 57°28 46°60	P P	Raghunath- pors, Barrabhoom, Jhalda, Chas,		

### SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS TAKEN IN ASSAM, FOR THE MONTH OF SEPTEMBER 1890.

The most notable features in the weather conditions during September are:—

1. During a large part of the month lowest pressure was over the Bay, and at times a trough of relatively low pressure extended from the head of the Bay in a northerly direct tion over Bengal. Changes of pressure have seldom been large, and readings differed to any large extent from the normal only towards the end of the month.

2. The rainfall distribution was largely influenced by the almost permanent low-pressure area over the Bay, especially during the first half of the month, when very small amounts were received; the defect in North Bengal and Behar being about 2 inches for

both the first and second weeks.

3. In ordinary years the western districts of Bengal derive part of their rain from the western current blowing across the Central Provinces, but this year, though steady westerly winds blew over almost the whole of Bengal for several days at the beginning of the month,

these winds were so dry that only very scattered showers fell at that time.

4. While the dry westerly winds were blowing in the early part of the month, and even after the ordinary easterly circulation recommenced, clear skies were general and temperature several degrees above the normal, but after the disturbed conditions commenced during the last ten days, a very rapid fall commenced, and some unusually low temperatures were recorded, especially in Behar and North Bengal.

As stated above, pressure was generally low over the Bay, but between the 13th and 19th, and again from the 22nd, the differences of pressure increased, causing what may be called the depressions of the month, the former being very shallow and local in its influence, but the latter of greater importance, because of the heavy rain received over the whole of

Bengal, which was under its influence from the 22nd till the end of the month.

From the 1st to the 5th lowest pressure was over North Bengal and North Behar, and a steady westerly current was blowing over almost the whole province as far east as the boundary of Assam, where the only showers at that time received in Bengal were probably caused by the meeting of this westerly current with that from the Assam valley. Day after day the stations in this corner reported rain, while elsewhere there was unusually dry, clear weather. On the 6th pressure was low over the Bay, and northerly winds were blowing in Orissa, but at inland stations light, variable breezes were general, or the westerly directions, which were gradually retreating, still obtained. Up till the 9th a trough of low pressure, extending from the centre of the Bay in a northerly direction, gradually drifted from east to west. During its passage variable winds prevailed, but afterwards the ordinary monsoon circulation became established, viz., south or south-west in Lower Bengal and east or south-east in the northern districts. From the 9th to the 13th the distribution of pressure was very uniform, and fine, clear weather prevailed in all districts, except North Bengal, where showers, sometimes heavy, were as general as earlier in the month.

Shallow depression from 13th to 19th .- On the 13th pressure began to fall in the northwest corner of the Bay, and a shallow depression formed, at first covering part of the Bay, Orissa, Chutia Nagpur, and the Central Provinces. After a further brisk fall of pressure it concentrated over Orissa on the 15th, where it practically remained till the 19th, when it filled up. On the 16th and 17th pressure rose to the north of the depression, and this rise forced it towards the south, more over the Circars, but this was the only motion observable while it existed. Rain commenced to fall in the central districts of Bengal on the 13th, and became more general till the 16th, after which it ceased in the north and east, though in South-West Bengal and Orissa showers fell till the 19th.

On the 19th and 20th fine weather generally prevailed but on the 21st unsettled conditions again began, a depression developing rapidly off the Circars on the 22nd in consequence of the rapid general rise of pressure in the surrounding country, while there it either

remained steady or fell.

Depression from 22nd to 30th.—On the 22nd, when the low pressure area first became clearly defined, lowest pressure was at Vizagapatam, just under 29.65 inches, and gradients were steeper than usual, especially towards the north-east, the difference between Vizagapatam and Sibsagar being a quarter of an inch. On the 23rd there was still further intensification, and gradients were again steeper over the head of the Bay, and in Lower Bengal, a clearly defined indraught towards the area of low pressure resulting. The centre was close to the coast between Gopalpur and Vizagapatam, and on the 24th it was well inland, moving in a north-westerly direction. Between the 25th and 26th the direction of motion was northerly, and after that it moved almost due east, covering part of Chutia Nagpur on the 27th, and almost entirely filling up on the 28th, when a widely diffused low pressure area extended from the north of Bengal as far as the Circars. The barometer continuing to rise rapidly in Bengal on the 29th, pressure was again lowest in the Circars and the adjacent part of the Bay, and the depression was in almost the same position as when it commenced to form a week before, with the difference that pressure was higher by two-tenths of an inch. On the 30th a widely diffused low pressure area covered the Bay, and the distribution was steadily becoming more uniform.

Between the 23rd and 26th rainfall in Bengal was almost entirely confined to the southern districts, and heavy rain fell daily in Orissa, but after the change of direction of motion on the 26th, winds became southerly in Orissa, South-West and East Bengal, and general rain fell in all districts, continuing very heavily in the northern districts on the two following days, and especially in North Bengal after the storm broke up. Local thunder storms occurred over the whole province, the most severe being in North Bengal and the northern parts of East Bengal, and these were in places accompanied by very heavy falls of rain. On the 30th conditions were becoming more settled, and only a few showers fell

in Lower Bengal.

Pressure—During the first half of the month underwent small changes only, and the mean was very nearly normal. On the 16th a wave of high pressure, entering the province from the north-east and moving to the south-west, caused a rapid rise of pressure, first in North Bengal and afterwards in the southern districts, and forced the low pressure area from the Orissa coast southwards over the Circars, where it filled. The largest change was 17 inch in Chutia Nagpur on the 17th. Pressure continued to rise rather rapidly, and up till the 26th there was a general excess, varying from .075 inch at Gopalpur to .05 inch in Assam, East and North Bengal and North Behar. After the depression commenced to move to the east from Central India, there was a rapid fall in the western districts, defect amounting to 2 inch at Hazaribagh and Dehree on the 27th. A very rapid rise followed on the 28th in Chutia Nagpur and South Behar, and in the central districts on the 29th, after which a slow rise continued, the distribution becoming very uniform.

The means for the month are below the normal by about '02 inch in the south of Orissa, and above by nearly 03 inch in East Bengal, but elsewhere the difference from the normal

is only a few thousandths of an inch.

Temperature—Was below the normal for a day or two at the beginning of the month, when a steady rise setting in, first in the western districts, a considerable excess soon accumulated, averaging 3° or more in Behar, Chutia Nagpur and South-West Bengal and more than I° over the whole province till about the middle of the month, after which it was generally below the normal, defect being between 3° and 5° at nearly all stations on the 24th. Temperature fell very rapidly between the 27th and 29th in Behar and North Bengal. On the 27th defect was between 6° and 7° in North Behar, and by the following day this had increased to between 10° and 12° at the more western stations, and on the 29th in Behar and North Bengal. Some very low night temperatures were recorded during these days, the lowest being 64.8° in Chutia Nagpur, 65.6° in North Bengal, and 66.5° in Behar. the filling up of the depression there was a rapid rise, and by the end of the week defect

was replaced by excess of 3° in Lower Bengal and 1° in the northern districts.

Rainfall—As stated above, was very scattered during the first half of the month in all districts, except North Bengal, but the formation of the two depressions in the south-west corner of the Bay gave continuous heavy rain in Orissa and part of South-West Bengal, and as the latter and more important of the two ultimately broke up in the northern districts, very heavy rain fell there at the end of the month. The greater part of the province has received deficient rainfall, the whole of North Bengal and the northern parts of Behar and East Bengal, as well as a strip of country running north and south and including Orissa and the western half of South-West Pengal, being the area over which falls have been heavier than usual. The connection of this distribution with the depressions is sufficiently clear, the lower districts being affected during their formation, and the northern districts while the second was filling up. Over the large area including Chutia Nagpur, South Behar, and part of North Behar on the west, and East Bengal and the eastern half of South-West Bengal on the east, the deficiency is very variable, being between 20 and 70 per cent. of the normal at eastern stations, and up to 40 per cent. in the western districts.

The comparison of the actual rainfall of the various large divisions of the province during the month is most accurately shown in the form of a percentage. The figures representing the rainfall for the month, calculated in this way, are included in the following table under the heading of September. This table really gives a condensed summary of the rainfall statistics of the present year up to date for each meteorological division; the first nine columns giving the actual average falls in each division for each month expressed as a percentage of the normal, while the tenth column gives the actual rainfall of the first nine months as a percent-

age of the normal rainfall for that period.

Meteorological Divisions.	January.	February.	March.	April.	May.	June.	July.	August,	September.	Actual rainfall of first nine months of 1890, expressed as a percentage of the normal fall for the period.
Orissa South-West Bengal	24 98	5 Nil	216 39	20 75	99 87	124 141	97 102	80	168	111 95
East Bengal	184	4	70	122	102	89	120	88	80	93
North Bengal	98	Nil	26	155	81	132	129	132	143	125
North Behar	38	2	25	40	95	140	174	134	97	180
South Behar	Nil	5	63	80	95	183	136	125	82	123
Chutia Nagrur	Nil	Nil	120	1	65	132	116	75	81	94

The districts which have received more than 50 per cent. excess rainfall are:—Po oree Cuttack, Balasore, Bogra, Dinagepore and Rungpore (where the average fall is double the normal): between 25 and 50 per cent.—Burdwan, Rajshahye and Purneah. Those where defect is over 50 per cent. are—Furreedpore, Dacca, and Tipperah: between 25 and 50 per cent.—Khoolna, Jessore, Backergunge, Durbhunga, Gya, South Bhagulpore, Lohardugga, and Manbhoom.

The heaviest falls in Orissa are 22 inches at Balasore and Jellasore, and 21 inches at Cuttack, while amounts at the other stations are nearly all over 15 inches. In South-West Bengal a large number of places received between 10 and 12 inches, except in Khoolna and Jessore, where falls are generally under 7 inches. In East Bengal the heaviest falls are Harrishpore 21·3, Subornakhally 16·8, Kutubdia 15·54, Jamalpore 14·1, and a few others in Chittagong and Mymensingh between 10 and 12 inches. In Tipperah and parts of Furreedpore and Dacca total falls are generally between 2 and 5 inches. In North Bengal falls are nearly all over 12, and in Rungpore, Julpigoree, Cooch Behar, and Darjeeling over 20 inches. The only reports under 10 inches are Pubna 8·85, Manda 6·55, and Sibgunge 7·78. The rainfall in Purneah is similar to that in North Bengal, amounts being generally between 15 and 20 inches, but in the other districts of North Bengal falls are nearly always between 5 and 10 inches In parts of South Behar less than 5 inches have been rather frequently registered, especially in Gya and the Sonthal Pergunnahs, but falls elsewhere are usually between 5 and 8 inches. In Chutia Nagpur the distribution is very uniform at about 7 inches.

The mean fall for the whole of Orissa, as shown in the table below, is 17.2 inches, or 6.9 above the normal; and in North Bengal, 19.17, which is 5.75 inches above the normal. The mean for South-West Bengal is practically normal, and for the other districts below the normal by 4.87 inches in East Bengal, 1.68 in Chutia Nagpur, 1.45 in South Behar, and .32 in North Behar.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the month of September 1890:—

						TEMP	BRATU	RE.				1	RAINF	ALL.			
				g month.	month.	Av	erages month		th above of month.		Of mo	nth.	Rain	ny day	ya.		e 15th
MRTHORO DIVIS		L		Highest observed during	Lowest observed during	Of highest of each day.	Of lowest of each day.	Of mean for each day.	Average mean of month above or below normal mean of month.	Average.	Normal average.	Variation.	Average number in month,	Normal average num- ber in month.	Variation,	Average,	Normal average.
Orissa		•••		95'4	72'8	88'4	78.2	83'3	-0.1	17:21	10.25	+6:96	18.3	15'3	+3.0	52.63	45.08
South-West Benga	> 444		***	103-47	69-29	89*2	78'0	83.6	+0%	9:36	9.04	+0.35	14'8	14'6	+0.5	48'59	46.67
East Bengal	***	***	***	92.8	71.1	87'2	77:8	82.2	+0.3	7.21	112.08	-4'87	12.2	16'5	-43	64.33	67:16
North Bengal	***	***	***	94'5	65'6	87'3	77'0	82.5	-0.4	19'17	13'42	+5.75	16'4	14'3	+0.1	82.57	64.28
North Behar				96.3	66.2	88*2	77.5	83.0	-0.2	9.23	9:85	-0.33	8:0	11.1	-2.3	60.79	44'36
Nouth Behar	***	***	***	97'0	67:3	89°2	77'3	83.3	-0.5	6.23	7.98	-1'45	10.3	12.2	-1.9	50.79	39-67
Chutia Nagpur		***	***	91.0*	64.8*	83.0*	71.0*	77.5*	-0.3*	7:03	8.71	-1.68	13'3	15'4	-27	43.91	44.97
Assam				95'6	67:3	86*7	75'4	81.1	-1'3	301	LAUS)	Mulli	(0.500 B		(80,000)	Oliver Street	100

<sup>·</sup> Chyebassa not included.

### SUPPLEMENT TO THE CALCUTTA GAZETTE, OCTOBER 15, 1890. 2091

The following table gives full data for the comparison of the actual and normal rainfall for the month of September in all districts of the province.

Percentage Table for September 1890.

Division.		DISTRICT			Normal district rainfall for September,	Actual district rainfall for September 1890.	Percentage of section to normal rainfall.	Percentage excess (+), defect (-).
2.01000		Pooree			9.98	15.81	158	+ 58
	1	Cuttack		***	9.53	16.74	176	+ 76
Orissa	)	Balasore			11.28	18:35	163	+ 63
	6	Midnapore		***	8.85	9.66	109	+ 9
		24-Pergunnahs			9.62	1006	105	+ 5
	1	Howrah			8 64	9.99	116	+ 16
	1	Hooghly		***	8:43	9.02	107	+ 7
District Control of the		Burdwan		•••	7.87	11.49	146	+ 45
		Bankoora			8.53	9.95	117	+ 17
South-West Ber	igal	Beerbhoom		58.0	9.16	10:21	111	+ 13
A Property	-	Nuddea		175	8.52	10.17	119	+ 15
		Khoolna			9 33	5.78	62	- 35
	i	Jessore	***	ETHERSTON O	8:43	5.13	61	- 39
STORY STORY		Moorshedabad	***	***	9.77	9-40	96	- 4
	i	Chittagong	***		14.07	11:27	80	- 20
A Property of		Backergunge			11.36	7:17	63	- 37
	1000	Noakholly	***	***	16.26	12.18	75	- 2
East Bengal	1	Furreedpore		***	8.68	3 61	42	- 5
Cast Dengar		Dacca	***	***	10.05	3.03	30	- 7
		Tipperah	•••	***	11.58	4.79	41	- 5
	1	Mymensingh	***	***	12.94	9.92	77	- 2
	1	Pubna	3.00		10.27	12:39	121	+ 2
	0.7	Bogra	***	100	10.70	17:03	159	+ 5
	0.00	Rajshahye	***		11.26	15.53	138	+ 3
The said the St.	1	Maldah	***	***	10:52	12.95	123	+ 2
North Bengal	2	Dinagepore	***		11:17	17-42	156	+ 5
North Dengar	)	Rungpore	***	***	13.00	25.96	199	+ 9
		Cooch Behar	***	***	21.95	26.63	121	+ 2
	100	Julpigoree	***	***	23.59	21.27	90	- 1
		Darjeeling	***		17:42	16.09	(2	_
	. ?	Purneah	***	***	13.23	18-19	135	+ 3
		North Bhagulpore	***	***	9:76	8.56	88	- 1
	- 1	Durbhunga	***	***	9:25	5.55	60	- 4
North Behar	. 3	Mozufferpore	***	***	8:27	7.03	85	- 1
North Denar		Chumparun	***		9.05	8.85	98	-
200	-	Sarun	***	***	7.68	8-93	105	+
Terrolle Social	}	Shahabad	***	***	7.29	7.76	106	+ 1
		Gya	***	***	6.90	5.14	73	_ 2
	1	Patna	***		7.20	7.2	99	
outh Behar	3	THE RESERVE OF THE PARTY OF THE	***	***	7.75	5.87	76	2
Buth Denar	200	Monghyr South Bhagulpore	***		7.98	4.73	. 59	- 41
		South Bhaguipore Sonthal Pergunnahs	***	***	8.06	6.89	85	- 18
	>	Hazaribagh	***	***	8.10	7:37	91	- 8
	(	Lohardugga	***		8.94	5.30	59	- 43
Chutia Nagpur	3		***		8.38	ALLEGA STATE OF THE PARTY OF TH	85	- 18
	1	Singbhoom	***			7.18	75	- 25
- I H NAME OF THE PARTY OF THE	-	Manbhoom	444	***	7.68	5.75	10	- 2

MATEOROLOGICAL OFFICE, BENGAL;

The 14th October 1393.

C. LITTLE,

Offg. Meteorological Reporter to the Govt. of Bengal.

### Meteorological Report of the Province of B

							JY 530	STATI	ON OB	SERVATION	NS.			
		Arn	PRESSU	RB.	Win	D.				TEMPERA	TURE.			
DISTRICT.	Representative station.	Wean barometric height, 8 A.M.	Wean reduced to sea-level.	variation from mean.	revailing dir e-	Mean wind re- locity.	tighest during week.	Date.	Lowest during week.	thate.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily tem- perature of week.	Variation from
Pooree	Pooree Gopalpore	29.813 29.825	29°837 29°835	002	? N	183 182	92.5	9th Oct. 4, 6 & 9 ,,	76°6 74°8	10th Oct.	90°3 89°3	79°3 77°4	84'8 83'4	1.
	False Point	29'811	20.833	-*032	NW	141	89. 2	7, 8 ,,	78.6	8th .,	91'8	75.1	82 0	4
Cuttack	Cuttack	29.784	29 846	'014	Calm		93'9	7th ",	74'8	10th ,	89'8	76.4	84.5	+
Balasore	Rainsore		1000	- 021	Calm	- 7/				SPACE OF	88'4	77.8		+
South-West Midnapore }	Saugor Island	29'816	29 842	020	Northerly	182	89.7	9th "	74:5	7th "		100	82.9	7
Midnspore	Midnapore	29.686	29.837	037	S, NE	199	92.3	6, 8 ,,	751	4 & 6	91.5	75.8	83.5	+1
Howrait	Calcutta	29.820	29.842	050	Calm	34	89:5	4, 6 ,,	74 2	4th ,,	88'4	75.5	82.0	7
Burdwan	Burdwan	29'754	29:855	013	sw	32	91.6	6, 8 ,,	76'4	4th .,	91.0	77 6	84:3	+1
Bankoora	Bankoora	29'517	29.819	038	Calm & Nort eriy	41	92'1	6 & 7	74'6	5th "	91.0	76:0	83.2	+1
Beerbhoom}	Raneegunge	29*523	29.859	-1001	ENE	28	92.5	7th ,,	74'4	5th	91.7	75.7	83.7	+1
Moorshedabad	Berhampore	99.774	55.813	- 028	sw, w		90°1	4th ,,	74.8	6th ,,	88'8	76.4	82.6	-0
Nudden "	Krishnaghur	29.790	29.839	014	SE	59	90.8	6, 8 & 10 Oct.	72.8	eth ,,	90.2	74.9	82.7	+0
Jessore }	Jessore	29-807	29'841	'027	Variable	40	99.8	4th	76'4	4, 7 ,,	90'4	77.5	83'9	+4
Chittagons	Chittagong	29 770	20.860	-'027	NW		90'7	7th	72.7	oth	88.2	76'5	82.4	+1
Chittagong Hill Trac	Demagiri .			16.5			observ	rations not re	eceived.		A sad		No.	
Backersunge	Barrisal	29*821	29*833	- '029	Cal n &		90.8	6, 8 Oct.	76'4	-5th .,	89.7	77:3	83.2	+1
Noakholly	Noakholly	29.821	20.862	+'005	Northerly Variable	56	89.0	7th "	72'3	8th "	88'1	75.4	81.8	+0
Furreedpore	Furreedpore	29.818	20'858	-*007	Calm	34	88*0	6, 7, 9 ,,	73'0	4th ,,	87.6	76'9	82'3	+0
Daces	Daces	29.813	29*836	- '034	Variable		1.16	9, 10	74'2	4th "	90.5	77'5	83.8	+0
Commillah	Commillah	29.815	29.851	-*007	ESE	21	80.8	7 10 "	74:3	9th ,,	90.5	75.2	82.7	+0
Mymensingh	Mymensingh	29.756	29.845	-:016	ENE		89*7	10th ,.	73 6	7th	8812	75.7	82.0	-mil
Bogra	Bogra	29'761	29*825	020	Calm		80,3	4, 6, & 10 Oct.	74:1	6, 8, 9 ,,	88'5	75-2	51.9	0
Pubna	Serajgunge	297795	29.842	-:020	North- easteriy.	26	90.6	10th ,,	78.7	6th .,	88.7	75.7	82.2	0
Rajshahye	Rampore Beau- lean.	29.769	29*840	011	Variable	37	50.3	6th	74'3	4th ,,	88.9	76.9	82.9	+1
Maldah	Maldah	29.754	29'835	+ '044	NE	53	901		74'1	6th "	90'0	75:9	83.0	+0
Dinagepore	Dinagepore	49.739	29'866	-0.2	E, NE	84	89 8	10th	73.7	5, 8, 9 ,,	88.0	10000000	81.6,	-0
Intrigoree t	Rungpore		29.857			01	89'9	iotn	71.1					100
Cooch Behar j	Julpigores	31: 565	29 091	'022		100		ioen "	OF C	4, 5, 8, 10th Oct.	86'1	71.5	78.8	-1
Darjeeling Hill Tracts	Darjeeling	53.060	-	- 1036	Variable		64.6		49.6	8, 9 .,	62.6	51.7	67:2	+0
Purneah	Purnesh %	20.716	29'843	-'022	NE	- 13	89*7	6th ,,	68'9	7th ,,	88 1	74.0	81.0	1
Mozufferpore	Mozufferpore	29'648	29*829	7-	Variable	58	90'8	7th "	75'2	9,10	8918	76.2	83.0	-
Durbhungs	Durbnungs .	19.681	29.850	- 020	Vanrible	51	90-9	7th	74'5	8th "	89'8	75'8	82'8	+0
Chumperun	Motinari	29.622	29.853	- +01	Calm	54	91.5	6, 8, 10 .,	72'8	8, 10 ,,	90.6	73'8	82.2	+5
sarun	Chupra	29'631	29'826	-'124	Variable	50	91:3	6-7 ,,	76:3	10th ,,	50.7	77:6	83.9	+3
	Dehree	29'479	29'837	080	Calm	15	91.3	6th "	71'0	7th	89.9	73.0	81.8	+1
shahabad {	Buxsr Arrah	29°587 29°637	201832	- 123 - 1019	WSW SW	80 6	89.0	7th	74'8	5, 7 " 10th "	89.4	75'0	82.5	14
Gya	Gya	20,464	29'847	015	Variable	104	91:4	6, 7 ,,	78'8	7, 8 ,,	90'4	75'4	82'9	+1
Patns	Bankipore	29'656	29'841	'025	Variable	53	91.9	4th "	75:7	7th ,,	90 3	76.7	83.5	+1
South Shaguipore Monghyr	Bhaguipore	29:665	29:829	026	Calm	12	90°2	5-7 .,	73.2	5th .,	89.3	74'9	821	+1
Southal Pergunnaha	Doomaa	20.345	29'844	'016	Variable	38	90.6	7th	67'4	8th	8914	73 0	51.3	+0
Hazaribagh	Hazaribagh	27'888	29-850	'017	Westerly		86'5	6th "	68.5	5, 7, 8 ,,	85.0	69.1	77'1	+1
Manbhoom	Ranchee	27 718	29 854	-'012	Calm	- 58	86'0	7th ,,	65 4	6th ,.	84'7	67:3	76'0	4
Singbheom	Chyebassa	29.074	29-845	010	ENE	28	90.9	7¢h ,,	70.5	8th "	89-8	72:1	80'9	+0
[	Sibsagar	29*568	29*909	- 007	NE		87.6	10th	7014	9th ,	84'5	71/6	78'1	7 1
Assam	Dhuba	29:737	29'856	028	ENE		8617	6th .,	72.8	5, 9 ,,	85'3	73*8	7916	+0
	Silchar	20.756	29.863	'021	Calm		94.5	10th .,	70'3	7th	91'5	78.4	82.9	

\* Mean of six days.

\*\*Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for The humidity of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by c and an overcast sky by 10. The are its numerical means or average of the rainall in that district determined from the returns sent in by the sub-divisional station for the period in question during that the district sending in returns divided by the number of stations. A rainy day is one on which at least hundred the of an inch fell.

or the week ending Friday, the 10th of October 1890.

	+	1 4 1	1	1,12			Diar	DIOI OB	SERVATIO	ons.		1000		
	noun ek.	ak at	Ow	WEEK.	11 (4) 5 (4)			RAI	NPALL.				The street	
	nd an	we-		WARA.	Sinc	se 1st of mo	nth.	Sin	ce 15th May	1890.	number	number days.	Representative	DISTRICT.
nt 8 A.M.	Average cloud amount at 8 A.M. for week,	Rainfall of week observing station.	Mean for district.	Normal mean,	Mesn for district,	Normal mean,	Variation,	Mean for district.	Normal mean.	Variation,	Average number of rainy days.	Normal number of rainy days.		
\$4 81	11	0°78 0°55		1'59	1 10	2.40			46.21			2.3	Pooree)	TAKE I
85	2.4	0.16	-04	13	01.50				B. Carlotte	00-95			Gopalpore (	Pooree
77	21	0.12	0.06	1.32	0.00	1.91	-1'82	54'14	45'96	+8'18	0.4	22	False Point)	
7	11	0.25	0:15	1:49	0.37	2.08	-1:71	51.69	48.50	+3.10	12	2.0	Cuttack	Cuttack
69	4'4	4'96	2'14	1:16	2.14	1.85	+0.50	49'37	55.03			485	Balasore	Balayore
101		M.	40.00				1,000	10.1		-5.68	2.0	2.4	Saugor Island	South-West Midnapor South 24-Pergunnalis
61	6.9	0.55	0.55	0.90	0.54	1'87	-1'13	44'96	47.61	-2.65	1.0	1.7	Midnapore	Midnapore
94	1.9	1.92	1.17	0.93	1.17	1.40	-0.23	48.03	47'88	+0.12	114	2.0	Calcutta {	24-Pergunnaha
81	1'4	0.13	0.28	0.83	0.92	1.27	-0.30	57*14	43'08	+14'06	1.0	1.8	Burdwan	Burdwan
82	1.7	Nil	0.22	0.79	0.45	1'34	-0*89	47 14	49'18	-2.04	0.8	1.9	Bankoone	Rankones
51	2:0	0.01	0.29	1.08	0.42	1'44	-1.02	22.80	49.39	+6:51	1.0	1'8		Rearbhoom
	1'9	0.50			100							I result	Rancegunge	West Burdwan
87	8.4	0.36	0.17	0.92	0.41	1'59	-0.83	53°24 40°88	45'53	+6.54	0.2	2.2	Berhampore	Moorsbedabad .
MI.				10			1000	ang a		+1.35	1.0	2.1	Krishnaghur	Nuddea
69	4.0	0.69	0,20	0.93	0.20	1'41	-0.51	46.52	49'17	-2.93	. 1'6	* 2.1	Jessore	Jessore
90	3:1	1.00	0.10	1.97	0.10	2.69	-2.59	113.92	106-53	2	1.0	2.8	Chittagong	Chistagong,
	-			2'41		3.49			74.16	-7		2'8	Demagiri	Chittagons Hill Tract
67	21	1:76	0.78	1.84	0.78	2.03	-1.52	61.92	70.85	-8.93	2.0	23	Barrisal	Backergunge
57	0.6	0:27	0.68	1.70	0.68	2.72	-2.04	89-75	99.21	-9.76	1.0	2.8	Noakholly	Noakholly
64	29	1'23	0.41	1.03	0.91	1.49	-0.28	38.82	51.28	-12.76	0.7	2.1	Farreedpore	Furrandnore
82	3'9	0.88	0.25	0.80	0.61	1'47	0.86	53:34	55.77	-2.43	1.0	21	Dacca	Dacca
82	2.9	0.41	0.32	1.26	0.85	2.26	-0:49	54'35	61.08	-9:73	1.2	5.5	Commillah	Tipperah
88	2.1	0°76	1'41	1'43	1.22	2.04	-0.40	63'14	64.75	+3.39	1'4	2.2	Mymensingh	Mymensingh
88	1.7	Nii	0.03	1'47	0.02	1.45	-1.17	67'83 49'07	54'06	+13:27	- 0.2	18	Bogra	Bogra
82	07	0.09	0.28	0.38	0.88	1.45	-0.66	65.65	49:37	-0.30	1.0	17	Serajgunge .	Pubna
85	0.6	0.14	0.42	1.19	0.99	1.02	-1.85	54.61	50,46	+15.19	0.7	1.9	Rampore Beauteal	THE RESERVE OF THE PARTY OF THE
56	9:9	0.85	0.18	1 19	0.18	1.01	-1'78	68'48	54'47	+14.01	1'0	2.0	Maldah	Maldah
86	0.8	1.22	0.78	1:31	1.69	2'38	-0:69	90.06	70.57	+14.01	0.6	1'9	Dinagepore	Dinagepore
91	0.0		5.5	1000	P. Carlot	2.85	-0'46	141.86		1. 10		1.9	Rungpore	Rungpore
	100	4'25	1.29	1.78	5.39				106.70	+35 16	2.5	2.3	Julpigoree {	Julpigoree Gooch Behar
93	5.4	0.07	2.40	1.95	3'38	2 96	+0.42	154.24	116.11	+38.43	3.0	2'4	Darjeeling	Darjeeling Hill Tract
67	14	0.46	0.33	1.30	0.42	1.87	-1'45	74.78	56'24	+18:54	1.3	1.3	Purneah §	Purneah North Bhagulpore
86	1.0	Nil	Nil	1.79	0.05	2 16	-2'14	50.80	41.63	+9:17	0.0	13		Movaffernore
81	0.3	Nil	NII	1'45	Nil	1.77	-1.77	55'77	42:71	+13.00	0.0	1'2	n de la companya de l	Durhhones
84		Nil	Nil	1.85	0.13	5.26	-2'44	62-94	45'45	+17'49	0.0	13	Motihari	Chumparun
84	0.3	0.02	Nil	1'60	Nil	2.07	-2.97	52.12	40.43	+11'69	0.0	1.2	Chupra	Sarun
78	0.7	Nil	1		NE C			Male					Denree)	
83	0.5	NH	Nil	1'46	6.18	1.90	-1 73	48'43	37.64	+10.79	0.0	1.0	Buxar	Shahabad
80	11	N	Nil	1'50	0.01	1.76	-1.75	56.21	39.49	+17'22	0.0	Die.	Arrah	0
78	0.3	NII	0.02	1'52	0.07	1'80	-1.73	46'83	38.97	+7'86	0.2	11	Gya Bankipore	Gya
81	0.3	Nil	0.05	1'34	0'10	1.68	-1.28							Patna South Bhagulpore
81	0							50.19	40.81	+9.28	0.5	1.3	Bnaguipore	Monghyr
81	1.4	0.79	0.34	1'28	0.21	1.76	-1.25	58:57	48.17	+5.40	1.8	1.2	Doomks	Sonthal Pergunnahe
61	10	Nil Nil	NII	1'15	0.16	1.81	-0.20	46.19	45 79	-0°59	0.0	1'5	Hazaribagh	Hazaribagh
80			Nil	1,52	0.08	1:73	-1.65	48.45	45'79	+0.39	0.0	1'4	Ranchi {	Manbhoom
502	1.0	0.59	Nil	0:79	0.26	1.09	-0.23	39:77	48 56	-15'79	0.0	1.7	Chyebassa	Singbhoom
88	8:9	1'20		7	1000	1	1		Wed and				Sibsagar ]	
89	20	0.07		its Si	7			W. COR	Charlety,			CALEL.	Dhubri	Assam
OF ST	7.0	0.68					TO THE		Sellin St.		ABLES		Silebar	

byears. The variations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.

The variations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.

The means of the district are the numerical average of the rainfall return received in the district, i.e., from total rainfall at the subdivisional received.

Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 10th of October 1890.

					R	AINFALL			alia c	To	TAL			New York	
Meteorological division.	District.	Station.	Saturday, 4th October.	Sunday, 5th October.	Monday, 6th October,	Tuesday, 7th Cetober,	Wednesday, 8th October.	fhursday, 9th October.	Friday, 10th October.	Number of rainy days.	Rainfall of week.	Total rain- fall since 1st of month,	Average total rain- fall from 1st of motnth,	Total rain- fail since 15th May 1890.	Avera rainfe from 1 May : date,
Oriesa	Pooree	Pogree Khurdah Banpur False Point Gop Satpara Pipli	0.20	1°54			 	0°14  0°16		1 1	0°14 1°54 0°16	0·14 1·54 0·60	1.94 2.36 2.91 2.40 2.7	,55:93 57:76 52:30	41 0 49 7 42 - 52 6
	Onstack	Jagatsingpore Banki Cuttack Kendrapara Jajpore Dharmsala Salipare		810					0'15	Nil Nil Nil Nil Nil Nil Nil Nil	Nil Nil 0:31 Nil Nil Nil Nil	Nil Nil Nil Nil Nil Nil Nil	2°25 1°78 1°77 1°76 2°41	52°62 54°37 71 60 45°60 46°37 47°98 43°74	40'3 43'2 50'8 40'7 48'3
	Balasore	Chandbali Bhuddruok Sorah Balasore Jelinsore Baripodah	0.03	0.60				0.10 0.10 0.02	,0.01	1 1 3 1 Nil	0.03 0.10 0.08 0.10 Nil	0°03 1°15 0°10 0°08 0°60 0°25	2.12 1.72 2.36 2.32 2.00 1.97	43°14 47°18 53°84 56°78 54°86 53°12	46/5 47/1 46/8 5/10 48/1 50/5
SOUTH-WEST Bengal.	Midnapore	Contai Saugor Island Tumlook Midnapore Ghattal Kukrahaty Garbetta	3°84 0°20 0°22 0°25	0.07				1'05	0.24	1 3 1 1 Nil 1	0°24 4°96 0°20 0°22 0°25 Nil 0°18	0°24 4°96 0°20 0°22 0°30 Nil 0°18	1:68 2:17 1:01 1:52 1:58	45°91 50°81 51°00 42°50 42°93 40°04 42°83	53°21 58°30 46°81 44°41 151°51
	24-Pergunnalis	Diamond Harbour  Canning Town Alipore Jail Barrackpore Dum-Dum Baraset Buseerhat	0°57 0°16 0°83 0°85 2°04 1°27 1°74	0.08				1.72	0.66	2 2 2 1 1 2 1	1.28 0.54 2.05 0.85 2.04 1.35 1.74	1.23 0.54 2.05 0.85 2.04 1.35	1'71	51°55 53°20 54°28 43°35 45°75 45°02 49°52	5371 5 5173 45767 45767 45767
	Howrah	Howrah Mohesreka (Ooloberiah) Serampore Hooghly	0.77 0.18 0.18 1.28	071				0.03		2 1 2 1	0.80 0.18 0.89 1.23	0°80 0°18 0°89 1°23	1'40 1'50 1'40 1'44	45'08 54'47 46'75 47'11	47185 48178 46193
	Surdwan	Culna Eurdwan Cutwa Raneegunge	0.22 1.44 0.13						0:16	2 1 Nii 1	0.55 1.60 0.13 Nil 0.01	1'60 0'13 1'17 0'01	1.30 1.45 0.95 1.40 1.40	48'91 51'74 61'60 58'04 51'62	46°51 51°03 40°76 46°28 44°21
	Rankoora	Bankur Bankoora Bishenpore Maliara Khatra Indas Kotalpore Anda Gangajalghati Raipore Sonamukhi	0°14 1°47 0°41 0°95 1°80						0.02	Nil 1 2 1 Nil Nil Nil Nil Nil	0°53 Nil 0°14 0°47 0°46 0°95 1°80 Nil Nil 0°29 Nil	0°53 Nil 0°35 0°47 1°96 0°95 1°80 0°40 Nil 0°78 Nil	1'57 0'63 1'19 1'97 P	44'95 53'00 46'64 53'78 35'10 55'18 62'06 46'31 59'84 47'94 48'23	4876 4876 4973 4576 5576
	Reerbhoom	Bh. Soory Hetampore Rampore Haut Bolpore Murarai	0°30 0°10 0°75							1 1 Nil Nil	0.80 0.10 0.75 Nil Nil	0°31 0°61 0°75 Nil Nil	1'36 1'41 1'60 ?	55'89 51'13 65'03 52'20 49'35	50°65 52°00 48°09
	N ddea	Ranaghat Kishnaghur Chooadanga Meherpore Kooshtea	0°54 0°27 0°41 1°25 0°67			55,				1 1 1 1	0°54 0°27 0°41 1°25 0°67	0°54 0°27 0°41 1°25 0°67	1'39 1'60 1'46 1'25 1'56	48'50 54'06 39'22 46'86 45'77	42°40 47°14 47°19 50°11
	Khoolna	Satkhira Bagirhat Khoolna Nakipur Rampal	0°32 0°38	0.16		0°16	0.01	0.84		Nil 2 1 1	0.63 Nil 1.16 0.38 0.16	0.63 Nil 1.16 0.38 0.16	1 63 1 45 1 02 ?	50°72 56°16 46°05 60°28 54°50	51111 5611 5030
	Jessore	Narail Jessore Jhenidah Magoorah Bongong	0.71 0.28 0.15	0.03			0.08			2 3 1 Nil 2	0.76 0.69 0.15 Nil 0.60	0°76 0°69 0°15 Nil 0°60	1.17 1.25 1.45 1.37 1.90	40°20 61°42 45°36 33°25 38°76	4931 5-01 4914 4598 4780
	Moorshedabad	Kandi Berhampore Lalbagh Azimgunge Jungipore Lalgola Jiagunge Akhrigunj Patkabari	0.78				0.02			Nil Nil Nil Nil Nil Nil	0°72 0°29 Nil Nil 0°02 Nil 1°05 Nil	1°25 0°83 0°11 Nil 0°26 Nil 1°05 0°10	1'66 1'74 1'68 1'85 1'10 1'51 P	60°53 52°44 56°19 51°42 43°13 55°40	46'84 47'61 46'31 47'44 46'32 47'50 1
FAST BREGAL	Chittagong	Kutubdia Satkanya		0.10		,	0°10 		==	1 Nil	0°10 Nil	6°10 Nii	2.66 2.78 P	124·76	184°8 88°8 !
	Chittegong Hill Tracts	Rangmati Rums	-	•••••			0.21		0.30	2	0.81	0.81	3.8F	68:10	77 38 70 81
	Buckergunge	Patuakhally Perozepore Burrisal Bhola	0.45 0.45 0.00	0°25 0°58 0°27	0.08		0°30		0'10	3 1 4 1	1.55 0.22 1.16 0.27	1°55 0°22 1°16 0°27	1.75 2.19 1.67 2.51	71.07 57.96 59.85 58.45	80°6 61°3 62°8 76°4

ement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 10th of October 1890 -contd.

					I	CAINFAL	L.	PAI .		To	TAL			165,13	- Sale
orical	District.	Station.	Saturday, 4th October.	Sunday, 5th October,	Monday, 6th October,	Tuesday, 7th October.	Wednesday, 8th October.	Thursday, 9th October.	Friday, 10th October,	Number of rainy days.	Rainfall of week.	Total rainfall since 1st of month.	Average total rain- fall from 1st of month.	Total rainfall since 15th May 1890.	Average rainfall from 15th May to date.
ENGAL		Gournaddi Bauphal	0'82	0.62			0.36			Nil 8	Nil 1'80	Nil 1'80	9	87·17 68·12	9
	Noakholly	Noakholly Fenny Harishpore			:::::		0.31	1.02		1 1 Nil	0'31 1'05 Nil	0.31 1.05 Nil	2.87 2.96	82°57 96°92 00°48	100°71 98°21 P
	Furreedpore	Madaripore Furreedpore	0.18							Nil 1	0°13 Nil 1°09	0:29 1:35 1:09	1.61 1.43 1.44	33'49 43'42 39'50	52'03 53'07 48'68
	Dacca	Munshigunge Dacca Naraingunge Manickgunge	0°20 1°12 0°39 0°38 0°83		 					1 1 1 1 1 1	0°20 1°12 0°39 0°38 0°83	0°20 1°12 0°39 0°72 0°83	1'91 1'54 1'24 1'17	53*81 49*64 57*84 53*20 60*74	64°81 55'08 56'75 46'21
	Hill Tipperah Tipperah	Agartola Comilla Chandpore Brahmunberia	0.63 0.07 0.18 0.14		0.51	0.03				1 2 1 2	0.92 0.18 0.19 0.32	0°63 0°10 0°18 0°35	1.90 2.03 3.86 1.73	56.86 59.13 51.84 49.62	56°87 71°76 70°92 57°32
		Ramchandra- pore Nasirnagar Daudkandi Kasba Laksham	0.00							Nil Nil Nil Nil	Nil 0'60 Nil Nil Nil	Nil 0'60 Nil Nil Nil	PPPP	67*66 33*61 25*23 50*87 65*33	1
1	Mymensingh	Kishoregunge Atia (Tangail) Mymensingh Jamalpore Netrokona Subornakhally Durgapore ShereporeTown Dewangang	0.65 0.68 0.56  0.05 2.52 0.52	0°03 0°52 2°70 2°90 0°14	198				0'46	2 1 2 1 1 1 2 2 1	2:58 0:68 0:59 0:52 2:70 0:05 5:42 0:66 0:46	3°26 0°68 0°59 0°52 2°70 0°05 5°42 0°66 1°01	2°13 1'76 1'98 1'78 2'76 ?	65'35 48'22 69'71 69'39 88'32 51'02 111'66 58'59 62'89	65°57 51 46 69°33 61°01 76°50 9
ITH WAL.	Pubna	Pubna Berajgunge	0.39							1	0°39 0°17	0°89 0°17	1.78 1.12	42°33 55°78	50°16 48°53
GAL,	Bogra	Sherepore Nowkuilla Bogra	0.03			==				Nil Nil Nil	0.03 Nil Nii 0.07	0'08 Nil Nil 0'22	1'62 2'55 1'47 2'23	67:12 56:24 67:18 78:63	51.66 50.69 57.63 53.18
	Rajshahye	Panchbibi  Beauleah Nattore Naogaon Lalpore	2.08 0.08	0.07					1.70	1 Nil Nil 1	2.08 0.08 Nil 1.70 Nil	2°11 0 08 0°39 2°02 0°40	1.60 1.73 1.24	63°02 77'37 56'91 45'74 35'47	49·39 51·38 50·77
	Maldab	Maldah Chanchal Gajol	0.12	0.05						Nil Nil	0°14 Nil 0°10 Nil	0°14 Nil 0°19 Nil	1'97 1'87	57:89 51:29 77:98 49:44	49'40 54'80
	Dinagepore	Mohadebpore Churamon Raigunge Dinagepore Raloorghat	0.16	0°40 0°35						Nil Nil Nil 1	0'16 Nil Nil 0'40 0'35 0'11	0°16 Nil Nil 0°40 0°25 0°11	1.68 1.50 2.49 2.46 1.40	59:50 70:50 78:98 72:42 70:97 89:84	54*50 51*08 56*23 60*74 49*91
	Rungpore	Thakoorgaon Bunwanigunge (Gyabanda) Rungpore Eurigram Bagdogra	0°11 1°17 0°23	0.20						1 1 2	0°50 1°17 0°30	1.45 1.17 2.90	2.24 2.07 2.39 2.83	104°25 77°78 80°92 97°14	59°08 70°72 70°51 82°01
	Julpigoree	(Nilphamari). Ulspore Julpikoree Alipore Docar Fallacotta	0.86	3.13 0.75 3.22						1 1 2 1	1°15 0°98 3°99 0°75 3°23	1 25 1 45 5 25 2 93 4 85 1 92	2·25 P ?	81 17 143 22 176 13 134 56 104 40	113°25
	Cooch Behar  Darjeeling Hill.	Debiganj Bhagatpore (Nagrakatta) Dinhatta Cooch Behar Mickilgunge Masshnanga Bura Silliguri Darjeeling	1.06 2.20 0.12 0.50 0.02 3.37 1.15	0'35 0'40 1'39 1'18 8'00 0'17	1 '03 0 '05 0 '02 0 '44	0°24	0.02			4 22 22 23 5 22	3°53 0°47 0°45 1°89 1°17 7°95 1°46 0°07	4'83 0'76 1'00 2'05 2'11 9'27 8'36 0'33	9 2'90 8'01 2'06 4'05 5'19 2'45 2'29	171'98 112 73 167 85 135'39 139'58 199'23 168'31 140'43 111'13	92:18 115:30 102:90 100:03 185:67 100:10 102:42 76:23
Benar	Purneah	Kalimpong Kurseong Kissengunge Arrareah Purneah	0.08	0°10 0°14		0.02				2 2 Nil 2	0°13 0°14 0°26 Nil 0°46	0°57 0°28 0°28 0°41 0°46	1.56 1.90 2.02	92.32 77.76 83.14	67:83 61:47 68:97
	North Bhagul-	Gondwara Baiarampore Mattari Kaliaganj Maddapore Scopool Pretabganj	0.82	0.08						Nil Nil 1 1	Nil Nil 0:29 0:82 0:06 0:75	0.70 Nii 0.82 0.82 0.15 0.75	9 9 9:42 1:44 9	88'40 59'21 41'97 59'20 61'86 47'49	47'08 46'10 2
	Durbhunga	Tajpore Durbnunga Madhubani Bahero								Nil Nil Nil Nil Nil	Nil Nil Nil Nil Nil	Nil Nil Nil Nil	2.07 1.78 1.47 P	50°97 56°19 60°52 50°74 48°20	41 23 43 84 43 06 1
	MeanGerpore	Roshera Sitamarhi Mozuflerpure Hajipore Pars Mahua Siuhar Pupri								NII	NII NII NII NII NII NII NII	0°07 Nil Nil Nil Nil Nil Nil Nil	1.78 1.86 2.84 ? 9	50°42 54°57 47°41 64°81 44°03 48°68 48°35	41°83 42°97 44°00 7 7

Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 10th of October 1890-concl

				1	R	AINFAL	L			Tor	AL				100
Meteorological Division.	District.	Station.	Saturday, 4th October,	Sunday, 5th October.	Mondey, 6th October,	Tuesday, 7th October,	Wednesday, 8th October.	Thursday, 9th. October,	Friday, 10th October.	Number of rainy days.	Rainfall of week.	Total rainfall since lst of month.	Average total rain- fall from 1st of month,	Total rainfall since 15th May 1890.	Ave rai from
NORTH BEHAR -concluded.	Chumparun	Motihari Bettiah Bagaha Burhurwa		******						Nil Nil Nil	Nil Nil Nil	Nil 0:24 0:08	2·47 11·65	65°60 60°24 56°32	
	Sarun	Gopalgunge Sewan								NH Nil	Nil Nil	Nil Nil	4°38 2°39	\$1.00 \$0.03	
SOUTH BRHAR	Shahabad	Chuprah Buxar Dehree Bhabooah Sasseram Arrah Mohaniah	*****							Nil Nil Nil Nil Nil Nil Nil	NII NII NII NII NII NII	Nii 6'03 Nii Nii 0'89 Nii	2:15 1:77 1:68 1:90 2:95 1:95	46'32 50'67 42'79 40'80 43'25 64'56 36'07	
	Gya	Aurungabad Gya Nowadah Jehanabad Arwal Dasidnayar Sherrghati Rajauli PakriBarawan								Nil Nil Nil Nil Nil Nil Nil Nil	NA NA NA NA NA NA NA NA NA NA NA NA NA N	Nil 0°02 Nil Nil Nil Nil 0°95 0°26 1°00	2:19 1:33 1:52 2:00 ?	58-98 59-72 54-41 52-93 55-43 29-65 36-99 45-96 52-27	
	Patna	Patna Dinspere Rehar Barrh Bickram Hilsa					0'20			Nil Nil Nil Nil Nil Nil	Nil 0°20 Nil Nil Nil Nil	Nil 0'27 Nil Nil Nil Nil	1'89 1'91 1'69 1'70	40°00 50°43 45°84 42°00 56'97 40°17	
	Monghyr South Bhagulpore.	Begooserai Monchyr Jamui Gogri Sheikpura Bhagulpore Banka	0.08							Nil Nil Nil Nil Nil Nil	Nil 0'08 Nil Nil Nil Nil Nil	Nil 6'08 6'12 Nil Nil Nil Nil 0'26	1'55 1'79 1'45 P P 2'04 1'55	42'03 52'55 58'20 72'10 45'79 54'36 38'74	
	Sonthal Pergunnabs,	Relgiong Bongaon  Bajmehal Godda Pakeur Nya Doemka	0.09	0.11		0.01	0°25 0°95 0°03 0°70			1 1 1 8 2 Nil	0°25 0°11 0°95 0°06 0°79 Nil	0°25 0°11 1°15 0°23 0°79 0°34	1.77 1.56 2.01 2.01 1.40	56'54 48'38 46'24 62'19 62'55 45'30	
		Jamtara Mohagama Naninat	0.15				0.41			Nil 1	0°12 Nil 0°41	0:44 Nil 0:41	1'82 ? ?	56.47 45.53 27.73	
CHUTTA NAG-	Hazaribagh	Pachamba (Giridi), Hazaribagh Semtagurah Mahudi Hills Jhoomra Hills Barhi Chatra Karaydeha							015	Nil Nil Nil Nil Nil Nil Nil Nil Nil	Nil Nil Nil Nil Nil Nil O'15 Nil Nil	0°13 0°47 0°10 0°87 Nii 0°10 1°33 2°93 0°40	1'48 1'66 1'57 1'67 1'61 9 9	40'00 38'20 41'52 54'00 47'34 46'35 54'36 45'31	The state of
	Lohardugga	Ramghar  Lohardugga Rauchi Palamow Silli Balumat Hosseinabad	110							Nil Nil Nil Nil Nil	Nil Nil Nil 1'10	1°10 0°84 0°50 2°20 Nil	0.96 1.25 1.72 1.72	52:53 41:87 44:18 40:30 41:75 38:30	
	Singbhoom	Garwah Chyebassa Chakradhar- pore. Ghatsilla							0.28	Nil Nil Nil Nil	0°28 Nil Nil	0'84 Nil 1'35 0'23	1.00 b	33°08 23°13 47°37 48°72	
	Manbhoom	Purulia Gobindpore Kaghunath-	****** ****** ******							Nil Nil Nil	NII NII NII	0.07 0.08 Nil	1°52 1°93	41°26 85°14 58°02	
		pore, Barrabhoom Jhalda Chas	0.08						0.50	Nil 1	-0°20 Nil 0°08	0°20 5°35 0°20	. P	42'45 61'55 40'06	

Explanation. -.....indicate that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of that are wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 14th October 1890.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS TAKEN IN ASSAM, FOR THE WEEK ENDING FRIDAY, THE 10TH OCTOBER 1890.

Excert on October 4th, the first day of the past week, weather was fine and settled, with neither pressure nor temperature differing to any great extent from the normal, and an almost entire absence of rainfall. On Saturday pressure was falling briskly in Behar, where readings were lowest, and up till then south-westerly or westerly winds had been blowing over Bengal as far east as Assam, but a shift to south-east of directions over the eastern half of the province seems to have caused the thunderstorms which prevailed so extensively on the evening of the 3rd in all districts except Behar, Chutia Nagpur, and Orissa, in the last two of which, however, a few scattered showers were received. Rain fell in varying quantity at nearly all stations in North Bengal, South-West Bengal and East Bengal, but after the 4th conditions again became settled with light variable winds in Bengal, and a slow indraught towards a commencing low-pressure area over the Bay. Up till the 6th there was very little change, and then a brisk rise commenced along the foot of the hills, giving relatively highest pressure there and north-east winds in East and North Bengal. At the same time a steady slow fall was going on in the Bay, making the depression daily more definite, at first in the extreme south, and probably covering a large area. By the end of the week it was not far from the coast, moving slowly towards Vizagapatam. The indraught to the low-pressure area stopped the flow of moist air from the Bay, so that during the latter part of the week very fine clear weather was general in Bengal. The influence of the depression, however, was beginning to be felt in Orissa, a few light showers falling there both on Thursday and Friday.

Pressure has been on an average below the normal by about two-hundredths of an inch at nearly all stations; changes have generally been below a twentieth of an inch. There was a brisk to moderate fall during the first two days, then a moderate rise for two days which gave a distribution very nearly normal, and on the last three a general slow fall.

gave a distribution very nearly normal, and on the last three a general slow fall.

Temperature has been below the normal in Assam and North Bengal, above the normal by less than half a degree in Lower Bengal, and above in Behar by about 1.5°. Changes have

been very irregular, but generally small.

Rainfall.—Almost all the rain of the week fell on Saturday the 4th, being caused by the thunderstorms which were so general on that day. The weather almost immediately became more settled, and during the rest of the week only a few light scattered showers fell in East Bengal, chiefly in Chittagong, Backergunge, and Noakhally; in North Bengal in the Cooch Behar and Darjeeling Hill Districts, and in Orissa towards the end of the week. Average falls are very small in Orissa, Behar, and Chutia Nagpur, and very little over half an inch in the other districts. The average fall expressed as a percentage of the normal gives Chutia Nagpur 3, North Behar 7, South Behar 8, Orissa 14, North Bengal 44, East Bengal 49, and South-West Bengal 70.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 10th of October 1890:—

	1		TEMPI	RATU	RB.					R	AINHA	LL.				
	g week.	week.	Averag	es for	week.	above or week.	(	of wee	k.	Ra	siny de	ys.	Since of mo		Since	15th 1890.
METEOROLOGICAL DIVISIORS.	Highest observed during	Lowest observed during	Of highest of each day.	Of lowest of each day.	Of mean for each day.	Average mean of week a below normal mean of v	Average.	Normal average.	Variation.	Average number in week.	Normal average num- ber in week,	Variation.	Average.	Normal average.	Average,	Normal average.
Drissa	93'9	73.6	90 0	77'1	88'6	+0.2	0.50	1'46	-1.50	0.9	23	-1'3	0.85	2.11	52.89	46.9
South-West Bengal	92.8	72.8	90.5	76'3	83'2	+0.4	0.67	0.96	-0.59	1.3	2.0	-0.8	0.76	1'45	49.35	48'08
East Bengal	91'1	72'3	88.9	76'4	82.6	+0.2	0.70	1'44	-0.74	13	2.4	-1.1	0.80	2.13	65.47	69'27
North Bengal	90.6	71'1	88'1	74'9	81.2	-0.3	0.60	1.38	-0.78	1'9	1.9	-0.7	0.80	2.10	83 79	66.11
North Behar	91.3	68.9	89.7	75'5	82'6	+1.6	0.10	1'54	-1'44	0.4	1.2	-0.8	0'14	2.20	61.00	46.63
South Benar	91.9	71.2	90.0	75'4	82'7	41.3	0.11	1'41	-1.30	0.2	1.3	-0.7	0.21	1.78	51.03	41'47
Chutia Nagpur	88.2*	65'4"	84'9"	68.8*	76'6°	0.	0.03	1.13	-1.10	0.1	1'5	-14	0.39	1.20	44'01	46'65
Assam	94'5	70'3	871	72'9	80'0	-10	Dist.		TO MAN		D GOLD	State .		Skuto	dia	Quille.

· Chyebassa not included.

METEOROLOGICAL OFFICE, BENGAL; The 14th October 1890.

C. LITTLE,

Offg. Meteorological Reporter to the Govt. of Bengal.

### Results of the Meteorological Observations taken at the Alipore Observatory from 5th to 11th October 1890.

			jo s	meter		l'emper	ATURE.			Нуском	ETRY.		WIND.			
Month,	Date.	Maximum in sun.	Number of hours bright sunshine.	Mean pressure barometer at 32° Fahr.	Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour pressure.	Dew point,	Humidity.	Prevailing direction.	Miles recorded.	Rain.	Weather,
	1	0		Inches.	0	0	0	0	0	Inches	0	%			Inches.	
Oct.	5th	147.5	10.1	29.728	82-9	89.4	122	77.2	78.6	0.924	86-8	88	WSW and calm	33	Nil	Chiefly clear
"	6th	143.5	8.8	776	81.9	88.5	12.8	75:7	78.1	-915	76.5	85	Calm and variable	19	.,	Chiefly clear
,	7th	145.5	8-9	799	81.8	88.5	13:3	75.2	77.1	·871	75.0	81	ENE and calm	30	,,	Chiefly clear
n	8th	147-3	8.7	788	81-6	88 4	13-3	75-1	77-7	*898	76.0	84	ENE, calm and variable.	42	1.17	Partially cloudy
**	9th	149-2	8:1	772	82-1	88-0	13 3	74-7	78-2	916	76-6	84	ENE and calm	28	Nii	Partially cloudy
,,	10th	153-0	10.6	776	82:3	88.8	12.5	76-8	77.4	-875	75-2	79	ESE and calm	40	en med	Chiefly clear
n	11th	147 4	8.0	.784	79-8	88-5	12:1	76.4	75.8	-839	73 9	82	ESE and calm	50		Partially cloudy

The mean pressure of the seven days  The average pressure of the corresponding period for	24 years,	sG.'s Offi	 oe	29.775 29.788
			111	Hours.
The total number of hours of bright sunshine		1.0		62.7
The maximum possible number of hours of sunshine	•••		100	82.2
The mean temperature of the seven days		A PARTY NAME OF		818
The average temperature of the corresponding period	for 24 ye	ars, SG.'s	Office	82.8
The extreme variation of temperature		***		14.7
The maximum temperature				89 4
				Miles,
The highest velocity of the wind in one hour				. 11
				lbs.
The highest pressure of wind on one square foot		No	t measu	
m 1-1:- 1 121-				%
The mean relative humidity	period for	24 years, S	-G.'s	83
Office		or Artisatish Spin		81
				Inches.
The total fall of rain from 5th to 11th October 1890	)			1.17
The average fall of the corresponding period for 24 y		.'s Office		1.73
The total fall from 1st January to 11th October 1890				54.25
The average fall of the corresponding period for 24		.'s Office		61.49

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph,

and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

t, thunder; <, lightning; p, passing temporary showers; a, dew; =, fog; g, gloomy; o, overcast. J. H. GILLILAND.

For Meteorological Reporter to the Goot. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA; Calcutta, the 13th October 1890.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 5th to 11th October 1890.

		0 A.M. reduced			Твмр	ERATURE,			E	YGROMETR	r.	hours.
MONTS.	Date.	Pressure at 10 corrected and re to 32° Fahr.	Daily mean.	Maximum,	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10	Vapour pressure at 10 A.M.	Dew point at 10 A.M.	Humidity at 10	Rainfall past 24 ho
October	6th 7th 8th 9th	Inches, 29·799 838 874 854 842 824 816	84·9 83·9 83·2 83·5 83·7 84·2 84·0	91·4 91·0 90·5 91·0 90·4 91·0 90·2	13·1 14·2 14·7 15·0 13·4 13·6 12·4	78-3 76-8 75-8 76-0 77-0 77-4 77-8	87·1 87·6 87·6 86·6 86·1 87·6 87·6	80·5 78·5 78·5 79·5 79·5 79·1 79·5	953 -854 -854 -914 -920 -880 -90	77.8 74.5 74.5 76.5 76.7 75.3 76.0	% 74 66 66 72 74 67 69	Inches

				Inches.	
The mean 10 A.M. pressure of the seven days	***			29-835	
The mean temperature of the seven days				83.9	
The extreme variation of temperature			***	15.6	
The maximum temperature		•••	***	91.4	
The mean 10 a.m. relative humidity of the se	ven days			°/ <sub>70</sub>	
The total fall of rain from 5th to 11th Octob				Inches. 0.80	

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,

For Meteorological Reporter to the Gott. of India.

METEOROLOGICAL OFFICE, INDIA; The 13th October 1890.

### MEMORANDUM.

Monthly review of deaths registered in forty-five districts of Bengal for the month of July 1890.

The deaths registered in forty-five districts in Bengal during the month of July 1890 were 115,581, and correspond to an annual rate of 21 per 1,000 of the aggregate population of those districts, which is 65,859,534. This rate is '24 lower than the average rate of the corresponding months of the past five years 1885—89, and is higher than the rate of the corresponding period of any of the past five years except 1887 and 1889, vide the figures below—

	July 1885.	July 1886,	July 1887.	July 1888.	July 1889.	Monthly average of five years, 1885—89.	July 1890.
Ratio of deaths per 1,000 of the population per annum	1872	16'80	24'84	20.25	25*08	21.54	21.00

The following table shows the highest proportions of deaths registered during the month of July 1890, compared with the corresponding month of 1889:—

Districts.	B	tatio per	mille	1	Ratio per mille during-						
1,00		J	uly 1890.		July 1889.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A 1879	3	aly 1890.	J	uly 1889.
Darjiling			48.36		54.72	Julpaiguri		***	32.88		31.44
Patna			33.72		39.12	Balasore	DECEMBER		28:68		44'04
Noakhali			33.00		34.32	Khulna	***		26.40	***	21-96
Chumparun			33.00		16.92	Gya			25.92		31.08

The total mortality during the month under review from the several registered death causes is compared in the following table with the mortality from those causes in the corresponding month of 1889 and the average of the five years 1885—89:—

					Ratio per mille du	ring-
or the prints of the				July 1890.	July 1889.	Monthly average of five years 1885-89.
Cholera	***			1.68	3'48	2.64
Small-pox	•••			.13	12	.09
Fever	***		***	14.76	16.08	13.80
Bowel-complaints	***	***	***	.60	-96	*84
Injury	144	***	***	.72	*84	.72
Other causes	***		***	2.88	3.48	2.88

Compared with the figures of July 1889, there is a noticeable reduction in the mortality of July 1890 under the heads cholera and fever.

The highest annual death-rates from the registered death-causes occurred in the following districts:—

	Cholora.	Ratio per	Fover.	Ratio :	Bowel-complaints.	Other causes.
Chumparun Patna Balasore Mozufferpore Poori Cuttack Shahabad Gya Sarun Midnapore Durbhanga	**************************************	mille. 15:48 8:28 5:76 4:68 4:32 3:96 3:84	Darjiling Julpaiguri Noakhali Khulna Kajshahye Rungpore	Batio mills 32:28 30:36 20:00 22:20 21:48	mille.  B   Darjiling 10 32	Ratio per mille. Poori 11'64

The mortality of the month under review, according to Sex, Class and Age, was distributed as follows:—

	tatio per	According t	o Class. Ratioper	According to Ag	e.	Ratio per
Males Females Ratio of male deaths to every 100 female deaths calculated on the proportion such mortality bears to the total male and female population	22 <sup>-80</sup> 19 <sup>-20</sup>	Christians Hindus Mahomedans Buddhists Other classes	15·84 21·36 20·52 17·88 17·04	Under 1 year  1 and under 5 years  5 , 10 ,  10 ,, 15 ,,  15 ,, 20 ,,  20 ,, 30 ,,  30 ,, 40 ,,  40 ,, 50 ,,  50 ,, 60 ,,  60 years and upwards		149 04 24·72 12·48 10·80 13·80 12·84 14·52 19·56 27·60 46·92

Detailed information regarding the mortuary statistics of the forty-five districts in Bengal during the month under review will be found in the statement appended.

W. H. Gregg, Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

		DIVISIONA		BURDWAN		Passipasor	BAJEHANYE	DA00A	9x00		BRAGULFORE	CHOTA NAG-		
		DIAPELICA		Burdwan Bunkura Rirehura Rivespore Hughil	Total (Hughli including	Howrsh 24-Pergunahs Nuddea Nuddea Murshidabad Khulaa Dinajpur	11111	Baces Paridpore Hackerganj Mymensing		11111	nin ah	Poori Balasore Hauarilisch Lohardugen	11	TOTAL FOR THE
			Males.	668,285 607,136 881,563 1,243,105 815,665 174,866	180,081	\$16,479 800,841 800,841 806,779 956,271 586,402 752,293	1,067,701 872,153 648,811 89,851 80,851	1,083,863 806,989 978,479 1,555,840 531,849	415,248 768,450 856,501 1,043,441 860,256	1,286,731 1,286,788 1,486,817 870,627 969,124	979,119 987,080 346,988 785,830	446,609 461,461 544,903 786,657		\$2,663,700
	STATE AND A	rorutation	Females.	722,528 534,616 412,595 1,272,570 347,385 177,589	524,974	818,902 819,521 849,142 880,104 640,307 611,646	7		405,524 745,911 895,058 1,081,241 1,014,659	Part State		441,878 443,819 659,839 612,39		96 104 06
			Total.	1,391,823 1,041,732 794,428 2,515,665 663,050 551,966	1,015,005	635.981 1,655,721 1,855,721 1,939.375 1,079.948 1,079.948	2,097,964 733,383 1,311,728 155,645	2,116,350 1,631,734 1,900,89 3,656,945 1,132,841	820,772 1,511,361 1,751,889 2,124,689 1,964,999	2,582,080 2,683,447 2,286,679 1,721,648 1,068,774	1,845,687 710,448 1,568,083	945,280 1,104,742 1,608,244	1,058,228	-
			Obolera.	2 - 5 2 s 8	2	858-28 <sub>00</sub>			- Si 199	1 - 100	STEELS.			İ
			.xoq-flam8	11 12 11 11 11 11 11 11 11 11 11 11 11 1	15	20220	1 : 001	= ;-3-	1 1684			F-12000	1 8 1	1
		<b>Братня уком</b>	Fevers. Bowel-complaints.	1,427 1,149 1,149 8,352 697 888	1,080	478 ,794 ,533 ,119 ,201 ,200 ,493	98896	1,821 1,891 1,881 1,881	2,312 2,312 3,175 2,275	2,672 2,574 1,796 2,518			1,320	1
		PROM :	Lujury.	31 49 59 59 59 59 59 59 59 59 59 59 59 59 59	165 56	190 81 106 113 8 131 6 171 9 72 5 109	135 22 8	22222 21218		132 87 86 86 88 88 18 18 18		342 6 47 145 145 145 145 145 145 145 145 145 145		1
			Other diseases.		8 273	255 1 1 255 2 2 2 2 2 2 2 2 2 2 2 2 2 2								-
1		po losaxo	All causes.	2,094 1,681 1,468 5,039 1,013	1,620	M OF 05 00 M OF 05 0	ionioi m	ભે ભે ભે જે ભે	100	4,540 8,658 8,910 4,736				
	ā		, Cholera,	50. 56. 56. 56. 56. 56. 56. 56. 56. 56. 56	98.	940 940 948 960 960 960 960 960 960 960 960 960 960				Control Con				-
	Disease.	BATTO P	-xod-llam2	87. 97.	.12	-A/ (1)	1 187 1						- 8	1
MORTALITY		RR 1,000	Forers.	18.08 18.08 18.09 18.09 18.09	12.73	9.00 111.04 110.04 110.04 110.04 110.04 110.04 110.04 110.04 110.04 110.04 110.		-				100	-	-
1000	Tau.5	BATIO PRE 1,000 OF POPULATION PER	Bowel-complaints.	. 45 4	1.88	the TOUCHER	10. 80. 10.32 70-			-		1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	-
ACCORDING	97.4	LATTON 1	-twinI	\$\$888Z	09.	*****	88448	****	19219	108	<b>1888</b>	####	.48	1
NG TO-	-0-A	PER ANNUM	Other diseases.	84.08 84.88 84.88	3.18	- 8 - 8 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5	3.00 8.28	2.5 2.1 2.4 1.80 1.80	2 2 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	4 1 9 5 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6	276 1180 1191	11.64 6.96 3.00 5.04	4.80	1
	1	dk.	*sosnvo NV	18-36 86-68 89-88 18-81 89-88 18-81	80-61	19.56 16.98 14.76 15.40 15.40 21.48			Market Street,	THE RESERVE OF	-	-	-	1
	Al-s	COMPARIPRED	Ratio of deaths per 1,000 of population per annum in the previous in the previous month.	16°24 1572 1932 1716 18°24 16°48	17-28	17.15 18.12 18.13		Property.				1.35	Sale	10000
	and a	COMPARISON WITH PREVIOUS PERIODS,	Ratio of deaths per 1,000 of population per annum in the correspond- ing month of the previous year,	83-28 86-40 87-08 82-20 82-20	21.13	9191818 9188 1888 1888 1888 1888 1888 1	19.08 119.08 17.40 81.72	14.52 13.44 19.55 19.55	34.72 39.12 31.08 31.92	16'92 19'56 24'72 16'92 35'64	28.54 17.04 18.88	86.55 84.05 84.05 84.05	31.80	1
		DRATES AMONG-	Malos.	1,082 918 787 2,719 541 344	882	1,984 1,984 1,981 1,981 1,914 1,914 1,551	1,258 1,258 1,258 848 868	1,178 2,063 2,604 1,085	1,138 1,410 1,84 1,84 1,84 1,84	2,530 2,286 2,286 1,837	1,283	1,199 1,199 1,201	971	-
	E-100 Frank		Remales.	942 763 722 9,559 474 863	735	1,077 1,077 1,554 1,164 1,118	1,610 663 1,019 885 885	1,145 919 1,787 1,942	2,356 2,356 2,161 1,684	2,010 1,675 1,704 2,145 1,637	725	1,069 1,069 1,104	914	1
	Sex.	RATIOPER 1,000 OF POPULATION PER ANNUM.	.solaft	19-32 21-72 23-16 26-16 20-33 23-64	69.13	21.15 15.00 17.12 17.13 17.14	22.28.28 22.28.28	11.52 25.52 26.53 26.53 26.53 26.53	80.08 80.08 80.08 80.08	18.36 18.36 18.36 18.36 18.36 18.36 18.36	16-44	21.43 21.43 18.00	331	1
		te 1,000 tarios	Females.	15-60 21-704 21-704 16-20 17-71	16.80	17.76 18.84 18.96 18.96 18.28 19.29 19.29	21.26 21.26 21.26 31.80	13°72 13°32 13°32 15°48	18 18 18 18 18 18 18 18 18 18 18 18 18 1	15.00 17.04 39.24 19.80	13:30	18.96 18.96 18.96 18.96	20.23	1
		-rom don solar male	Ratio of male death, on the proportion a tality bears to the and female populati	251123S	128	8514183 8514183	180 889	21098	RHER	11255	13111	19191	107	

		an Crotata		Втариля		PRESIDENCY  BAJSHAHTE CHITAGONG PAINA  BALGULFORE CHOTA NAG-	
		DISTRICTS		Burdwan Barkura Barkura Birhum Midnapore Hughli Serampore Berampore	Total (Hughli including Serampore).	Servenholms  Servennahs  Nudden  Jessore  Krinins  Dinsjour  Bajsishye  Rours Brish bye  Rours  Bours  Pulms  Pulms  Pulms  Roursing  Chittagong  Namersing  Chittagong  Chittagong  Noutherst  Branchend  Chittagong  Chittagong  Chittagong  Noutherst  Rourseah  Purresh  Rourseah	TOTAL FOR THE
-			Christians.	111 1	4	111111111111111111111111111111111111111	1
		DEA	-supuiB	1,663 1,464 1,170 3 4,639 816 1 531	1 1,847	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1-
		DEATES AMONG	Mahomedana.			180 222221111 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$6,4
		- 9801	Buddbiste.	111111	21	***************************************	113
			Отры сјаваев.	103	1	**************************************	1
	Class.	RA	-straisting	11 25 45 50 50 50 50 50 50 50 50 50 50 50 50 50	9	11762 28 128 28 138 148 44 117 28 117	A 170
		RATIO PER 1,000 OF POPULATI PER ANNUM.	Hindus.	17.78 19.20 22.68 24.96 18.36 18.36 18.36 19.76	100	The state of the s	\$ 21.36
		B 1,000 OF PO PER ANNUM.	Mahomedans,	73 16-32 50 15-48 68 19-08 96 20-04 84 15-00			L
		POPUL UM.	Buddhists.	288423	1		17.88
		ATTOR	Other chases.	555	1	25 25 25 25 25 25 25 25 25 25 25 25 25 2	leii.
MOR			Under 1 year.	44 820 44 820 88 88		25	19,227
MORTALITY			I and under 5 years.	1988 1988 1988 1988 1988 1988 1988 1988	1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	16,870
			5 and under 10 years.	84 116 117 872 832 832 840		217 1169 1116 1116 1116 1116 1116 1116 11	10,288
ACCORDING		ā	10 and under 15 years.	EL 25 2 2 2		1138 1144 1154 1154 1155 1155 1155 1155 115	6,088
G TO		DEATES.	years, years, years, years, years,	25 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2	13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	5,760 11,
			years.	254 1140 1140 1110 57	1	2009 2009 2009 2009 2009 2009 2009 2009	872 11,
			years.	233 1146 1123 1130 1130 1140 1140 1140 1140 1140 114		11118	,585 10,402
			be and under 60 years.	224 134 135 113 113 113 413 413 413 413 413 413 413		12. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	8,989
	Age.	~	on years and up-	28 4 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8	1	2	18,510
			Under I year.	180.96 373.80 178.15 128.76 105.86	27 -124	100 - 20 - 100 - 20 - 20 - 20 - 20 - 20	149.04
		RATIO P	years,	113.44 118.38 25.76 1 25.92 1 25.92	45.79	11.00	72
		PRK 1,600	years.	6.00 6.00 9.24 8.9.12 8.9.12 10.88 119.20 11	10	7.7.7.6.6.6.7.7.7.7.6.6.6.7.7.7.7.6.6.6.7	90
		Ao	years. 15 and under 20	6'96 15'24 8'04 15'24 8'16 11'64 10'20 15'24 5'52 8'76 13'32 12'96	2	881125188888888888888888888888888888888	10.86
		POPULATION	20 and under 30	25 11 64 15 36 15 36 16 68 16		12	.80 12.84
		TION 1	04 rebun and 08	202222	18	90509051148911418918141891814189181818	14
		HR AN	0d reban ban 04	28 17.55 88 21.12 90 17.74 98 26.28 96 28 26.28 17.89 17.89 17.89		10.00 10.00	25 19-56
		NUM	50 and under 60 years,	18 18 18 18 18 18 18 18 18 18 18 18 18 1	1000	15	

DEVICE OF SANITARY COMMISSIONER FOR BENGAL,

Weekly review of births and deaths in twenty-seven of the principal towns of Bengal for the week ending with Saturday, the 27th September 1890.

### BIRTHS.

The births registered during the week ending with Saturday, the 27th September 1890, in twenty-seven principal towns of Bengal correspond to an annual rate of 22.2 per 1,000 of the aggregate population of those towns, which is 1,061,574. This rate is 3.3 below the average rate of the corresponding week of the past five years, and is also below the rate of the corresponding week of any of the past five years except 1887—vide the figures below—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of births per 1,000 of the population per aimum	28.9	26.9	18.7	27'3	25.7	25'5	22.3

The births registered in each of the last four weeks in each of the twenty-seven principal towns correspond to the following rates per 1,000 of the population:—

TOTAL TOTAL TOTAL	W	eeks e	nding-	1		- 1	VEEKS 1	NDING-	
Towns.	6th Sept. 1896.	18th Sept. 1890. 20th Sept. 1890.		27th Sept. 1890,	Towns.	6th Sept. 1890.	13th Sept. 1890.	20th Sept. 1890.	27th Sept, 1890.
Burdwan Midnapore Hughli and Chinsurah Serampore Utterpara Howrah Bali Krishnagar Ranaghat Santipore Jozefre Rampore Beauleah Darjiling Dacea	53°4 17°0 39°4 39°3 37°7 13°2 10°5 34°1 6°0 22°8  34°2 29°6 11°7	33'6 9'3 39'4 31'4 37'7 21'8 17'5 26'5  26'8 12'2 39'4 87'0 14'9	91'4 13'9 89'4 45'1 37'7 21'8 10'5 12'0 12'0 14'0 	16'8 9'3 18'1 41'2 25'3 22'9 17'5 17'5 12'4'0 5'2 12'2 57'8 44'5 21'4	Narainganj Chittacong Comillah Patna City Gya Arrah Mozufferpore Durbhanga Chupra Bhagulpore Monchyr Purneah Poori  Total	29°0 9°4 27°0 17°2 30°1 78°0 25°5 22°0 25°2 30°8 45°2 20°8 10°5	20°7 9°4 11°6 15°3 26°0 16°7 7°3 22°8 28°2 30°8 88°9 10°4 14°7	37:3 4:7 19:3 14:6 42:4 57:4 25:5 37:0 38:2 19:9 46:1 10:4 12:6	41'4 11'7 27'0 11'4 26'0 19'1 24'3 58'7 13'1 29'0 10'4 12'6

It will be seen that last week the highest birth-rate was returned from Rampore Beauleah (57.8), and the lowest from Santipore (5.2).

### DEATHS.

The deaths registered during the week under review correspond to an annual rate of 22.4 per 1,000 of the population. The rate of the week is 10.5 below the average rate of the corresponding week of the past five years, and also below the rate of the corresponding week of any of the past five years except 1887—vide the figures below—

	1885.	1886.	1887.	1889.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of deaths per 1,000 of the population per annum	43'1	37:4	20.3	32.8	30'8	32.9	22.4

The deaths registered in each of the last four weeks in each of the twenty-seven towns correspond to the following rates per 1,000 of the population:—

The second second	1	WEEKE	ENDING	-			WEEKS	ENDING	-	
Towns.	6th Sept. 1890.	13th Sept, 1890.	20th Sept. 1896.	27th Sept. 1890.	Towns.	6th Sept. 1890,	18th Sept. 1890,	20th Sept. 1890.	27th Sept, 1890.	
Burdwan Midnapore Hughli and Chinsurah Serampore Utterpara Howrah Bai Krishnarar Ranaghat Santipore Jessore Hespore Hespore Jessore Hespore He	17'0 18'1 43'2 28'3 10'9 14'0 11'4 12'0 16'8 36'7 18'4 59'3	29'0 20'1 37'7 55'0 28'3 13'7 10'5 42'7 6'0 19'3 42'8 30'4 14'8 28'5	19'8 17'0 24'6 28'4 28'3 15'2 38'6 11'4 28'9 14'0 18'4 31'5 14'8 21'4	24'4 18'6 21'3 49'1 18'9 14'9 35'1 18'9 6'0  6'1 36'8 37'0 22'1	Narainganj Chittarong Comillah Patna City Gya Arrah Mozufferpore Durbhanga Chupra Bhagulpore Monghyr Purneah Poori Total	16'6 18'8 19'8 26'9 56'1 29'9 20'7 39'3 82'5 23'5 27'1 10'4 48'3	16'6 9'4 27'0 20'4 40'3 15'8 24'3 22'8 39'2 18'1 21'7 13'9 31'5	16-6 14-1 19-3 14-9 38-9 38-9 20-8 36-2 28-3 17-3 21-0	4'11 16'4 15'4 19'8 89'6 83'5 15'8 83'9 11'1 20'8 28'9 6'9 14'7	

It will be seen that last week the highest mortality occurred in the town of Serampore (49.1) and the lowest in Narainganj (4.1). No deaths were registered during the week in Santipore

Measured by last week's mortality, the highest annual death-rates from the following registered death-causes were as follows :-

(	Cholera.			Fever.		Ott	ier causes.	
	I g . 1	Ratio per			Ratio pe	r		Ratio per mille.
Arrah Gya		4·8 4·1	Rampore I	Beauleah	28.9	Serampore Dacca		15.7
Patna City Durbhanga		3.9	Gya Darjiling		24.6	Gya		10.2

From bowel-complaints high mortality occurred in the town of Serampore-mortality 15.7

per 1,000 of population.

The total mortality from the several registered death-causes in the twenty-seven principal towns amounted to 1.6 from cholera, against 2.3 per 1,000 in the preceding week; '04 from small-pox, against nil; 10.4 from fever, against 11'; 3.3 from bowel-complaints, against 2.6; '3 from injury, against the same ratio; and 6.7 from other causes, against 7.2 in the preceding week.

The mortality of last week according to Sex, Class, and Age was as follows:—

According to Sex.		According	to Class.		Accord	ung to A	ge.	951
	Ratio per mille.			Ratio per		Ec. 7	1	Ratio per
Males	22·5 22·4	Christians Hindus Mahomedans		22·4 22·2 23·3	Under 1 yea 1 and under 5 ,, 10 ,, 15 ,, 20 ,, 30 ,, 40 ,, 60 years and	5 years 10 " 15 " 20 " 30 " 40 " 50 "		221·2 30·8 12·2 J2·4 12·2 11·8 13·9 14·1 26·8 45·9

Detailed information regarding the vital statistics of the twenty-seven principal towns dealt with in the above review will be found in the statement appended.

W. H. GREGG, Dip. Publ. Health, Camb.,

The 13th October 1890.

Sanitary Commissioner for Bengal.

		POPU	POPULATION	N.	100		- 10	BIRTHS	E .			18			11			Die	MOI	MORTALITY		CCOR	ACCORDING TO	-0.I	-a.				CC.	4
NAMES OF MUNICIPALI.	, i				NUM	NUMBER OF-	1	RATI OF P	RATIO PRE 1,000 OF POPULATION PER ANNUM.	1,000 TON	g to every			DEATS	DRATHS PROM	1		1	RATIO	o Per		1,003 OP POPULATE	ULATIC	ON PER	t,000 or pop		DEATHS.	RATIO PER 1,600 OF POPULATION	NESO	PER
		Malos.	Females,	.latoT	Wales.	Pemales.	Total	Males.	Females.	Total.	Ratio of male births.	Оројега.	small-pox.	Естега.	Bowel-complaints.	Injury.	Other diseases.	*sosnoo nv	Оројеги-	.xoq-llam8	Pevers.	Bowel-complaints.	·Linfuj	Other diseases.	Ratio of deaths per language	vious week,	Females.	Males.		Females.
Burdwan		18,063	16,617	34,086	90	. 02	111	19.3	4.6	8.91	266		J	6	61	1	10	97			13.7	50		26	19.8	8 1	10	8 81.7	ě	16.2
Midnapore Midnapore	i	16,997	16,633	38,560	+	03	9	6.5	3.1	8.9	200		1	9	1	- 1	10	12		1	9.3	1.0			9		- 00	-	=	19.5
Hughli and Ch.	-nsui	12201.9		31,687	60	90	100	6.9	13.1	18.1	87	1	1	9		1	10	13	1	1	8.6	1.6	9	8.5 21	8.4.8		8 10	8.6	65	85.58
Serampore Serampore	-	18,559 1		26,496	16	10	01	81.4	8.6	6.15	\$20	#4	;	90	60	1	00	22	1	1	157	15.7	2.0	12.7	1.61	4 15	10	57.5	40	94
5		8,046	2,464	6,516	03	-	8	3 18.5	6.6	28.63	200	;	1	1	-	1	1	Qt.		1	4.6			9.4 18	8-9	65		17.1	04	=
Howrah		53,153 3	87,660	90,813	83	11	40	13.5		6.66	135	1	1	10	7	1	00	56	9.		5.7	4.0	-	FI 9.5	1.9 13	2 1	80	17.6	7	9
-	1	7,836	1000	14,816	63	03		2 10.2	1.0	17.6	150	1	1	9	03	:	91	10	-	1	1.17	0.4	1	7.0	35.1 38	9	6	7-69	1-	10
Krishnagar		18,263 1		27,477	9	89	•	9 11.3	67	17.0	200	1	1	80	1	:	91	07	1	4	151		1	8.8 18	3.9 11	*	.0	9.61	18	8.8
4 Ranaghas	1	No.	4,655	8,683	61	01	•	15.0	-	0.5%	100	1	1	1	i	1	1	1	1	1	1	-1	-	0.9	6.0 58	6	1	19.9		
C Santipore	1	18,708 1	15,979	29,687	01	1	-0	50	1.7	2.0	200	1	:	1	1	:				1	1	1		1	0.91		!	;	*	
1	1	4,830	3,665	8,495	1	-		2 6.1	1.9	18-3	100		1	1	i		1	1	1	î	1			1.9	4.81 I.9	-	_	-	14.8	- 91
Rajshahye Rampore Beaul	esh	10,766	9,025	19,791	12	10	250	31.2	26.3	8.49	120	1	1	11	1	1	93	14	1	-	6-85	-		62	36.8 31.	10	10	19-3	27.6	10
Darjiling	i	4,579	2,439	7,018	64	*	9	8 14.8	9.65	44.5	20	1	1	60	!	:	61	10	1	1	97 97		-	14.8 87	8.11 0.4	80		111.4	82.3	05
G Baces	1	42,789 8	87,879	191'08	18	13	33	3 11.7	6.4	51.4	120	1	-	10	9		11	34	9.	,	9.9	8.8	1	0.1	1.88 J.88	12	13	20.22	18	174
( Naraingan)	ì	7,605	4,956	12,561	*	9	10	9.91 6	8.4.8	41.4	99	1	1	4	-1	1		1	1	1	4.1	84		4	9.91 1.1			1	10-5	10
Chittagong Chittagong	1	13,340	8,790	23,130	60	01		2 7.0	4.7	11.7	150	1	-	4	93	1	1		1		9.6	4.1	No.	2.3	16.4 14.1	100	10	2 19.2	11.8	90
Comillah	1	8,153	-	13,506	10	03		19.3	1.1	27.0	250	I	-	-	1	1	49	*	1	1	1	ï		12.4	.61 F.2	93	20	19.1	9.7	1-
Patna City	1	78,762 8	81,475	160,237	91	14	35	8.9	4.2	11.4	150	120	1	13	15	01	50	19	8-8		6.5	4.9	9	6.2	19.8 14.9	988	33	25.1	14.	· De
Gya	1	38,990	37,831	76,121	81	16	38	8 15.0	10.0	0.98	137	9	1	36	1	1	15	88	T.		9.42	-		10.5 39	98	98	350	82.28	4	0
Arrah	1	20,960 2	22,505	48,465	9	10	91	6 7.2	11.9	1.61	99	4	1	12	61		1	88	8.8	1.5	25.1	46	-	-	33.5 35	9 13	15	55.25	#5	24
Mozufferpore . Mozufferpore	1	28,084	19,658	42,742	12	00	08	9 14.6	1.6	84.3	150	:	:	4	60	1	10	13			4.9	*50	9.	6.1	15.8 28	- 4		0.6	63	- 00
Durbhanga Durbhanga	1	88,774 8	82,822	969'99	25	25	49	9.61. 6	6.81	38.2	101	10	-	21	1		6	07	6.0	16.0	16.9	10	1	-	33-0 36	91	. 63	**	83	00
Chupra		25,116	\$6,554	61,670	-	9	13	3 7.0	0.9	13.1	116	63	_	4	1	1	00	11	8.0		4.0	1.0		2 0.5	11.1 28	71	40		13	-
Shagulpore Shagulpore	-	20,640	27,818	67,458	17	15	38	8 154	13.6	0.65	113	-	_	13			0	00	9		11.8	10		8.1	20.8	99	7 10	105	-66	7
Monghyr	1	28,154 2	398,98	57,520	19	35	44	\$ 17-2	22.6	8.68	26			76	0			00	,		17.8				0	i			ě	0.00
Purneah		8,463	6,553	15,016	97	-	65	5.9	2.5	10.4	900			1		4		0 0		:			2	000	9		10		4 .	9 5
Poori	-	-	11,537	24.784	05	00		6.3	300	19.6	100	I	1		•			, a	10			*			يتديثار				945	3
								- 0	1539		700	1	1	4	1	1	4		1	7		,	1.02	F. 8	14.7 21.0		02	4 11.8		0.8
Total		KKD 088 K	A 400 A 12	100000000000000000000000000000000000000							Read and			10000		-	1	1		1	-		1	1	1 T		1			10

SUPPLEMENT TO THE CALCUTTA GAZETTE, OCTOBER 15, 1890.

W. H. GREGG, Dip. Publ. Wealth, Camb.

															1	10RT	ALITY	ACC	ORDI	NG T	0-										
						Cls	158.															Δε	Įĕ.			ter.					
DISTRICTS.	NAMES OF MUNICIPALI- TIES.		DBAT	THE AM	ong-	-	RAT	IO PER	1,000 c							DHA	гив.		S.				1	RATIO P	BR 1,000	or Port	LATION	PER AN	NUM.		
		Christians,	Hindus.	Mahomedans.	Buddhists.	Other classes.	Christians.	Hindus.	Mahomedans.	Buddhists.	Other classes.	Under 1 year.	l'and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and up- wards.	Onder I year.	land under5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and up-
Burdwan	Burdwan		13	3				28.2	15 2			3			3	1		4		2	3	286-4			63-0	16.6		30-2		42.4	105'3
Midnapore	Midnapore		8	4			***	16.0	28-8	100		2	***		1		9	2	1	4		140.0	100		171		14'2	18.8	14'0	100-8	
Hugh'i	Hughli and Chin-	1	11	1	-		1	22.6	16.9	-		. 4	1	2		1		2	1	2	***	259.0	23'4	36.0		20.7		18.2	12.5	40.0	
	surah Serampore		23	2				47'4	110-9		***	2	2	1			6	1	3	1	5	146'5	57.6	20.7	93.7		57-9	10'5	46'3	27.2	186.9
Serampore {	Utterpara		2	***	1			19.5				1	***								1	323.0									200.0
	Howrsh	100	14	11		-	27'5	10.7	25'3		ies	6	5				5	7	1	1	1	151'2	46'9				11.2	18'9	4'4	9.2	13-9
Howrah {	Bali		8	9	-		V.	31.0	79-3			3	***	,					1	1	9	430.9		48.8	87.6				26.9	49'6	142-1
(	Krishpagar	1248	9	1	1	No.	-	25.1	6.3	1991	***	5	1	1					1	1	1	524.2	21.1	15.1			4		15.9	24'7	30.1
Nuddes	Ranaghat		1		100	-	100	7.1			***	1									3	251.2	The Life	The same		***				3	
	Santipore						.,,	1		***				***	***	***					***	1	***		***		***				***
Jessore	Jessore		-	1			1 ***	-	13.6	100		1	***			-"						268.0						***			
Rajshahye	Rampore Beauleal		7			lim.	82.5	36-7	37.1	"	***	2	3	2		1	",				9	256-2	110.0	50.0	28'9	31'3	12.2	***	42'4		108'0
Darjiling	Darilling					1	650.0	FEE S	35.9		""		,			- 17	9	1		1			80-9		13. 13		52.0	36'3		213'1	
The many fact	Deven	15/6	0 6435	10		***	0000	20.6	23.8	***		6				***	5	4			6	1044	10000	***				Series	12.4	- 0.0 26	***
Dacca ar}	Naminant	1	16	18	""		-			***				1	***	8	200		1	200		164'4	14.1	5.2	***	21'4	17.0	17.8		54.9	56'0
hittagong	(Males and	5-625					***		8.4	***	***		1	***		***		***	".	***			91.5	***			***			***	**
Tipperah		""	1	6			***	9.0	20.4	***	***	1	1	***	1	***	1	***	1	2		92.4	26'4	***	20.5		11.5		23.0	95.9	
Patna	Comillah			4	***		""		28.1		***	3	*	***	***			***	1			525'3	***		***				39.6		
Con .	Patna City		44	17			""	19-2	21.6	.99	***	15	6			3	3	5	6	4	- 11	181.0	21.4	12'4	14.4	14.0	5'4	11.2	16-6	14.7	41'4
Phahahad	Gys	-	53	5	-		-	45.9	16-2		***	15	8	3	2	1	3	6		8	8	435'8	65:5	22.3	15'5	9.9	10.6	24'5	21.3	63.3	80.8
	Arrab	-	16	12				26'8	50.3	***		2	3	3	3	3	5	2	1	2		80-7	32.3	30'4	35'3	48.6	\$3.1	16.3	11.1	33.6	72-1
Mozufferpore	Mozufferpore	***	10	3		***		17:3	12'5	***	***	7	1	***		***	1	2	***		2	381.3	12-9	***			61	14'9	***	-	48.7
Durbhanga	Durbhanga		30	12		***		32 2	35.5	***	***	9	- 6	5	2	1	5	2	3	4	5	200-6	41.0	33.5	18.7	12.9	19.2	9.3	21'0	47:4	81.4
Sarun	Chupra		9	2				11.8	8.7	***		4	1	. 1		1	2	1		1	***	147'4	10.1	8-7		15.0	11'3	6.7	***	12.0	24
Bhagulpore	Bhagulpore		10	13				13.1	39.5			8	5	***		1	3	3	1		2	348'4	48.0	***	***	12.4	14.3	16.8	8.3		28.9
Monghyr	Monghyr	***	28	4				82.6	16.2		***	6	8	2		2	4	4	1	- 1	4	210.1	66.8	14.7		27.5	20.1	23.3	8.3	13.1	58-0
Purneah	Purneah	***	1	1		***	144	5.7	9.2	***	***	1	***	***		1					· 9	183.7	444	***		52.3	***				
Pocri	Poori	101	7	5-11	***	un.		14.8				1		***	***	***		1	4		í	171'6		***				12'8	63.6		28.8
	TOTAL	3	323	132			22'4	22.5	23'3			108	55	26	23	19	48	47	34	40	58	221'2	30.8	12.3	12'4	12'2	11.8	13.9	14'1	26'8	45'9

### PUBLIC WORKS DEPARTMENT,-BENGAL.

### IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagiruthee, Jellinghee, and Brahmapootra for the mouth of July 1890.

	1								RIVER	GANGES.								BHAGIR			VER NGHEE.		VER APOOTRA.
		Mire	apur.	Ben	ares.	Bu	xar.	Din	apur.	Mon	ghyr.	Saheb	gunge.	Rampore	Beauleah.	Goal	undo.	Berha	mpore.	Saruj	ogunge.	Gow	hatty.
	Miles.	AT- O	98	134	. 88	The s	8	111	18	287	110	381	16	471	8	169	120		7				
DATE,	stance.		pad	rom Allaha-	From Miras-		rom Benares	From Benares	From Buxar	From Benares	From Dinapur	From Benares	From Monghyr	From Benares	From Satteb-	From Benares	From Rampore Beauleah	Tay I					
	ā	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sca-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Heigh over me sea-lev
t  dd  h		31'50 28'700 26'70 26'70 26'70 26'70 25'50 25'50 25'50 25'783 27'783 22'97 22'97 22'97 22'97 22'97 23'83 27'75 27'750 29'750 30'750 30'75	287-72 234-72 233-72 232-72 231-72 231-72 234-05 234-05 234-05 232-92 230-05 128-89 230-05 128-89 230-05 233-72 238-72 238-72 238-72 238-72 237-47 238-72 23	29'75 26'00 25'00 24'50 24'50 24'50 24'50 26'00 22'00 22'00 22'00 22'00 22'00 22'00 22'00 22'00 23'00 22'00 22'00 23'00 22'00 22'00 23'00 22'00 23'00 25'50 26'00 25'50 25'50 29'00 29'00 29'50 30'00 29'50 29'75 28'50 29'75 28'750 29'75	226'55 222'80 221'80 221'80 221'80 221'80 221'80 221'80 221'80 221'80 222'80 218'80 218'80 218'80 225'30 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80 225'80	25'00 24'59 23'00 21'75 21'58 21'67 21'67 22'67 22'67 22'67 22'67 22'67 22'67 22'67 22'67 22'67 22'67 22'67 22'67 24'67 24'25 24'83 25'58 25'58 25'58 26'68	194-65 193-55 192-05 190-63 190-63 190-72 191-05 191-85 191-72 191-05 191-88 189-88 189-88 193-72 191-88 193-72 193-88 194-87 195-30 194-88 194-97 195-30 194-88 194-97 195-30 194-88 194-97 195-30 194-88 194-97 195-30 194-88 194-97 195-30 194-88 194-97	25'60 25'30 24'75 23'70 23'15 23'70 24'50 24'50 24'50 25'40 25'50 25'50 26'30 27'40 27'70 25'80 26'70 27'40 27'70 28'70 20'70 20'70 20'70 20'70 20'70 20'70 20'70 20'70 20'70 20'70 20'70	159°83 159°73 158°98 257°93 157°43 157°43 157°93 158°73 158°73 158°73 159°63 158°73 159°63 160°43 160°43 160°43 160°43 161°63 161°63 161°63 161°63 161°63 161°63 163°63 16	19'67 19'50 19'25 18'83 17'67 16'75 16'75 17'03 17'73 17'73 18'93 18'98 18'98 18'97 18'75 20'25 22'58 29'83 29'50 22'18 22'50 22'50 22'50 22'50 22'50 22'50 22'50 22'50 22'50 22'50 22'50 22'52 25'17 25'17 25'14	121'52 121'19 120'68 110'52 118'69 118'35 118'93 119'18 119'77 119'73 120'43 120'93 120'69 122'10 122'43 122'68 123'35 124'35 124'35 124'35 124'35 124'35 124'35 125'85 125'85 125'87 12	15.50 18.83 18.83 19.17 18.50 17.67 16.50 16.83 17.00 17.42 17.92 18.50 18.98	85'59 86'00 86'83 87'17 86'50 85'67 84'67 84'67 84'50 85'42 85'50 86'50 86'50 86'50 86'50 86'50 86'50 86'50 87'00 88'75	15 '00 16 '25 17 '01 17 '13 17 '21 16 '83 16 '58 16 '17 15 '92 16 '25 16 '46 16 '79 17 '00 17 '38 17 '58 17 '78 17 '88 17 '88 17 '88 19 '88 19 '88 19 '88 20 '25 20 '63 21 '00 21 '50 22 '04 22 '58 22 '96 23 '33 23 '58	57'00 58'25 59'10 59'13 59'13 59'21 58'58 58'17 67'92 58'95 58'79 59'38 59'38 59'38 59'38 60'17 61'09 61'46 61'83 62'63 63'50 63'50 64'78 64'78 64'78 64'78 65'33 65'58	17-83 18-75 19-50 19-33 19-33 19-33 19-17 19-17 19-08 19-25 19-39 19-33 19-50 19-83 20-00 20-00 20-00 20-83 20-67 20-75 20-83 20-67 20-75 20-83 20-92 20-92 21-50 21-50 21-50	26'77' 28'38' 44' 25'27' 28'44' 25'27' 28'11 25'12' 28'12' 28'12' 28'27' 28'24'	18-75 20-17 21-00 21-50 21-50 21-50 21-50 20-67 20-63 20-67 20-75 20-83 21-17 21-42 21-83 22-23 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-50 22-42 21-75 23-83 23-83 24-95 24-95 24-95 24-78 26-78 26-78 26-78 26-78 26-78 26-78	52'49 58'91 54'74 55'24 55'24 55'24 55'16 54'57 54'24 55'49 55'16 55'57 55'99 56'16 56'24 56'49 57'57 57'99 58'32 58'26 59'24 56'32 60'32 60'32 60'32 60'32	18*25 16*13 18*88 20*00 20*58 20*58 20*58 20*58 20*38 20*38 20*38 20*71 21*17 21*58 22*67 23*63 23*94 24*75 25*50	22*55 22*43 23*18 24*80 24*89 24*88 24*83 24*83 24*83 24*13 24*18 25*67 25*67 25*67 25*67 25*87 25*87 26*30 26*22 26*23 26*30 26*23 26*30	25:00 24:10 23:07 28:10 22:80 22:50 22:50 22:70 23:00 24:00 24:40 24:70 25:40 25:80 25:80 25:80 25:80 25:80 25:80 25:80 26:20 26:10 26:40 26:50 26:50 26:70 26:70	178-7 172-8 171-8 171-8 171-8 171-8 171-9 171-9 171-9 172-7 178-9 178-9 174-8 175-8

CALCUTTA,
The 11th October 1890.

G. A. G. Shawe, Under-Secretary to the Gort. of Bengal. SUPPLEMENT TO THE CALOUTTA GAZETTE, OCTOBER 15, 1890. 2107

## PUBLIC WORKS DEPARTMENT,—BENGAL. IRRIGATION BRANCH.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1890-91.

Areas leased for irrigation up to the end of July 1890.

			rge.	m	1	the the and of	of Iand up to	, in		1	DETAILS O	F AREAS I	LEASED.				Rain		Rain		
			lisch	discharge	ed.	uring the	rea of	erops.	14			Annual	leases.	200			1890	-91.	1889	-90.	
CIRCLE.	District.	Canal.	Estimated full discl	Average diso month.	Discharge utilis	Approximate are irrigated du year up to the menth,	Approximate area of under irrigation the same date last	Five years, all c	Five years, kharif,	Kharif.	Rabi.	Sugarcane.	Bhadoi.	Hot-weather.	Total.	GRAND TOTAL.	During month.	Up to end of month.	During month.	Up to end of month,	REMARKS.
	ſ	Taldunda, 1st reach Ditto, 2nd ,,	C. ft. 1,342 566	C. ft. 856 125	C. ft. } 140	Acres. 10,217	Acres. 9,270	Acres,	Acres. 10,082	Acres.	Acres.	Acres.	Acres,	Acres,	Acres.	Acres. 10,082	Inches. 16.90	Inches. 28'88 33'20	Inches. 18'07 15'75	Inches, 28.07 30.50	
4	Cuttack	Machgong Kendrapara Gobri Do extension	776 1,067 372-82 648	183 609'49 41'44 54	183 529:47 40:26 54	97,400 87,865 1,921 2,500	27,171 38,018 950 1,450		22,626 48,450 2,287 2,147		270				270	22,626 48,720 2,287 2,147	8.63 11.35	27°70 18°34 18°77 No gauge	28°85 14°86 15°43	37°31 30°76 31°12	
RISSA	Balasore	Patamoondi High Level, Range I Ditto, ditto II Ditto, ditto III	885 608 727'16 727'16	256 322-89	201 279-19	3,626 16,044 2,161 31,726	3,814 18,035 2,057 19,680	****** ****** ******	10,209 25,038 2,456 34,400		86 29	5 141			91 29 141	10,209 25,129 2,485 34,541	7°35	24°15 20°11	7°40 6°97	20°95	* Figures for these will be reported later
		Total				133,469	120,445	*****	157,695		385	146			531	158,226	*****		*****	-1144	on.
		Total of the corresponding period of last year	******	*****			*****		139,756	*****	5,888	155			6,043	145,799		*****			
	Midnapore {	Midnapore	1,411	756	593	62,644	54,773		65,404						******	65,404	6.08	30.03	7.82	21.13	Whole month
ERN.	Howrab	Panchkoorah Tidal reaches, Ranges I-II	522	79	69	8,678 93	2,407 357		3,668 386		*****			*****		3,668 386	5'87	26.79	7.24	22.76	21 Days dis charging.
		Total	*****	nam.		66,415	57,587	*****	69,458	*****	Tired.			*****		69,458		*****			
		Total of the corresponding period of last year						*****	56,105			3				56,105	Ser. 1				
one{	Shahabad { Patna and { Gya.	Western Main Buxar Arah Eastern Main Patna	4,342 1,226 2,000 }1,466	1,758 435 1,000 676	53 241 776 480	9,330 41,760 92,456 1,040 35,675	9,413 33,557 99,176 524 33,137	11,560 51,474 90,209 1,132 37,906		1,235 1,646 7,018	· · · · · · · · · · · · · · · · · · ·	215 1,093 2,212 8 401	48 69 84	309 2,564 5,668	1,759 5.351 14,967 8 6,276	17,319 56,925 165,476 1,144 44,182	} 14:04 26:25 19:50	23:07 38:41 34:44	13°98 11°06 11°47	24·13 21·07 23·03	
		Total		******		180,261	175,800	192,281	F	15,690	T	3,929	201	8,541	28,361	220,842					
		Total of the corresponding period of last year		******				160,242		46,735		4,401	437	11,570	63,143	223,385					
		Grand Total				380,145	353,782	192,281	227,153	15,690	385	4,075	201	8,511	28,892	448,326		*****			
		Grand Total of the corresponding period of last			4,			160,242	195,861	46,785	5,888	4,556	437	11,570	69,186	4,95,289			******		

CALCUTTA,

G. A. G. SHAWE,

### PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

### SOUTH-WESTERN CIRCLE.

### NUDDEA RIVERS.

Statement showing Quantities of Goods carried during the month of August 1890.

			TOTAL GOVERNMEN	T AND PRIVATE.	17 12 1	PRIVATE		
ber of	DESCRIPTION.		Quantity-Tons.		Value.	Quantity,	Value.	REMARKS.
118.		Up.	Down.	Total.	Rupees.	Tons.	Rupees,	REM
0	1. Grain	684	15,805	16,489	11,89,467	16,489	11,89,467	
0	O Catton		35.7	35.7	2,440		2,440	
2	o Ollerada	162-11	7,480-66	7,642-77	7,82,800		7,82,800	
0	4 Call	5,988	575.48	6,563.48	6,62,278	6,563.48	6,62,278	
0	* D'			THE STATE OF THE PARTY.	0,02,210	0,007.10	0,02,210	
**	6. Metal	379	50	429	72,912		72,912	
4	7. Building materials		180 62	331-12	3,797		3,797	
1		14,190.59	26,955	41,145.59	52,39,372		52,39,372	
)	0 77 1	2,922.4	145	3,067.4	29,078			
	10 minham	247 c. ft.	140	247 c. ft.	370	247 c. ft.	29,073	
1	10. Timber		4 000 - 4		383	4,236 ,,	370	
5	11. Bamboos	16 ,,	4,220 c. ft.	4,236 ,,	909	4,200 -,,	283	
1 &	12. Total	£ 24,476.60 &	51,227.46 &	75,704.06 &7	WO 00 000	£ 75,704.06 &	2	
afts.		263 c. ft.	4,220 c. ft.	4,483 c. ft. }	79,82,892	4,483 c. ft	79,82,892	
&	13. Total of same	€ 23,177 &	49,773 &	72,950 &)		( 72,950 &	1-0110	
fts.	month last year	302 c. ft.	4,677 e. ft.	4,979 c. ft.	70,44,947	4,979 c. ft.	70,44,947	
		Up.	Down.	Total.	todo s		7.00	
					m-4-1 4-11-		Rs. A.	3
	number of boats ply-	1,304	2,260	3,564		ge of month—	00 000 1	
	g cargo No.	1,004	2,200	3,004	24 + 25 + 2		36,969 1	
rm!	ty boats, steamers, &c. No.	970	125	1.005	m 1 . 11		L APPEALED	
	The second secon	910	120	1,095	Total tolla		02 002 12	
	number of boats ply-	1 700	1.045	0.050	month last	year	37,007 15	
in	passenger No.	1,708	1,245	2,953			1 1 3 2 3 3	8
mp	ty boats ,,	182	19	201				
	registered tonnage,	50 001 00	1.00.000	100 100 00	Me	morandum of	Tollage.	
	rgo Tons	59,831-63	1,03,608	163,439.63	Market of the		7. D/12 010 1	
otal	registered tonnage,			0 -0-	the state	ALED PHE SALES	Lisa de publico	H
pa	ssenger Tons	2,174	1,533	3,707			THE DESIGNATION OF THE PERSON	
On-1	nileage					not recovered		3
stin	nated value of cargo Rs.	39,20,218	40,61,921	79,82,139		he 1st of the		
um	ber of passengers No.		1,368	5,491	mont	h	1,557 9	
	, bamboos C. ft.	16	4,220	4,236				
	bullahs ,,	247		247	2. Tollage p	per month	36,969 1	
Do.,	THE RESIDENCE OF THE PARTY OF T	372	381	753				-
Do., stin	nated value of rafts Rs.			96 061 15 0	3. Total	•••	38,526 10	
Do., stin olla	nated value of rafts Rs.	14,982-9-6	21,979-5-6	36,961-15-0	The second secon			
olla omp	nated value of rafts Rs. ge on boats ,, oounded tollage on		21,979-5-6	30,301-13-0				
olla omp	nated value of rafts Rs. ge on boats ,, younded tollage on ats Rs.	14,982-9-6	21,979-5-6		4. Amount	paid into		
stin olla omp bo	pated value of rafts Rs. ge on boats ,, bounded tollage on ats Rs. ge on rafts	14,982-9-6			4. Amount			
stin olla omp bo olla otal	pated value of rafts Rs. ge on boats ,, bounded tollage on ats Rs. ge on rafts ,, tollage on boats per	14,982-9-6			4. Amount	paid into	20.010 0	
olla omp bo olla otal	pated value of rafts Rs. ge on boats ,, bounded tollage on ats Rs. ge on rafts ,, tollage on boats per	14,982-9-6			4. Amount trease	paid into	20.010 0	
Do., Estin Colla Comp bo Colla Cotal Cotal Cotal	pated value of rafts Rs. ge on boats ,, bounded tollage on ats Rs. ge on rafts ,, tollage on boats per	14,982-9-6  1-14-0		7-2-0	4. Amount trease	paid into ary during the h	36,616 0	

<sup>·</sup> Boats in these rivers do not pay per mile.

Abstract for the month of August 1890 as compared with the corresponding month of the previous year.

		189	0-91.	188	9-90.
		During the month.	To end of the month.	During the month.	To end of the month.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
llage		36,969 1 0	91,152 0 6	37,007 15 6	89,099 3 9

CALCUTTA, The 11th October 1890.

G. A. G. Shawe, Under-Secy. to the Govt. of Bengal.

### PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

## SOUTH-WESTERN CIRCLE. ORISSA COAST CANAL SYSTEM.

LENGTH OF CANAL OPEN, 971 MILES.

Statement showing Quantities of Goods carried during the month of August 1890.

			TOTAL GOVERNMEN	T AND PRIVATE.		PRI	VATE.
Number of boats or	DESCRIPTION.		Quantity-Tons.		Value,	Quantity.	Value,
rafts.		Up.	Down.	Total.	Rupees.	Tons.	Rupees,
204	1. Grain	1,876	257	2,133	1,29,277	2,133	1,29,27
Similar.	2. Cotton		***	******			
2	3. Oilseeds	15	******	15	1,265	15	1,26
34	4. Salt	******	303	303	34,800	303	34,80
8	5. Piece-goods		20	20	37,700	20	37,70
4	6. Metal	64		64	14,020	64	14,00
9	7. Building materials	6	15	21	132	21	13
562	8. Miscellaneous	356	472	828	2,56,476	826	2,56,35
10	9. Fuel	1	158	159	1,963	119	1,48
6 rafts	10. Timber	452 c. ft.		452 c. ft.	409	452 c. ft.	40
1 raft	11. Bamboos	25 "	******	25 "	2	25 "	8144
833 &	12. Total	1 2,318 &	1,225	3,543 & 7	4,76,044	∫ 3,501 &	} 4,75,42
7 rafts	12. Total	477 c. ft.	****	477 c. ft. 5		1 477 c.ft.	5 1,10,12
594 &	13. Total of same	973 &	1,211	2,184 & 7	1,80,942	€ 2,130 &	1,78,69
	month last year.	822 c. ft.	The state of the s	822 c. ft. f	2,00,012	822 c ft.	( 1,10,00
5 rafts	month may your	022 0. 20.		000 0. 20. 7	THE EULE DE	1-1 000 0 10.	1
5 rafts	Indicate and Jour	Up.	Down.	Total.		[-] GOO C 16.	Rs
. Total	number of boats plying	Up.		Total.		ge of month	1—
. Total	number of boats plying go No.		Down. 507		24+25+	ge of month	6,11
t. Total car	number of boats plying go No. number of boats ply- passenger No.	Up.		Total.		ge of month	6,11
. Total car . Total ing	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons	Up. 326	507	Total. 833	24+25+: Total toll month las	ge of month 26 age of sa t year	6,11 me 4,50
. Total car . Total ing . Total car	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage,	Up. 326 86 4,662	507 66 4,013	Total.  833 152 8,675	24+25+: Total toll month las	ge of month	6,11 me 4,50
i. Total car i. Total ing i. Total car i. Total	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons	Up. 326 86 4,662 881	507 66 4,013 823	Total.  833 152 8,675 1,704	24+25+: Total toll month las	ge of month 26 age of sa t year	6,11 me 4,50
. Total car . Total ing . Total car . Total pas	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons nileage	Up. 326 86 4,662 881 183,733	507 66 4,013 823 163,138	Total.  833 152 8,675 1,704 346,871	24+25+: Total toll month las	ge of month 26 age of sa t year	6,11 me 4,50
. Total car Total ing Total car Total pas Ton-m Estim	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons sileage ated value of cargo Rs.	Up. 326 86 4,662 881 183,733 1,17,940	507 66 4,013 823 163,138 3,57,693	Total.  833  152  8,675  1,704  346,871  4,75,633	24+25+: Total toll month las	ge of month 26 age of sa t year	6,11 me 4,50 Tollage.
i. Total car ing Total car Total pas Ton-n Estim	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons alleage ated value of cargo Rs. per of passengers No.	Up.  326  86  4,662  881  183,733  1,17,940  1,465	507 66 4,013 823 163,138	Total.  833  152  8,675  1,704  346,871  4,75,633  3,095	24+25+: Total toll month las  Mo	ge of month 26 age of sa t year emorandum o	6,11 me 4,50  Tollage.
4. Total car car car car Total car Total pas Ton-n Car Numb Rafts,	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons alleage ated value of cargo Rs. per of passengers No, bamboos C, ft.	86 4,662 881 183,733 1,17,940 1,465 25	507 66 4,013 823 163,138 3,57,693	Total.  833 152 8,675 1,704 346,871 4,75,633 3,095 25	24+25+: Total toll month las  Mo  1. Balance on the	ge of month 26 age of sa t year  emorandum of	6,11 me 4,50  f Tollage.  Red onth 4,595
d. Total car ing Total car Total pas Ton-n Estim Numb Rafts, Do.,	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons nileage ated value of cargo Rs. per of passengers No. bamboos C. ft. bullahs ,,	86 4,662 881 183,733 1,17,940 1,465 25 452	507 66 4,013 823 163,138 3,57,693	Total.  833 152 8,675 1,704 346,871 4,75,633 3,095 25 452	24+25+: Total toll month las  Mo	ge of month 26 age of sa t year  emorandum of	6,11 me 4,50 f Tollage.
Total car Total ing Total car Total pas Ton-m Estim Numb Rafts, Do.,	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons ated value of cargo Rs. bamboos C, ft. bullahs ated value of rafts Rs.	86 4,662 881 183,733 1,17,940 1,465 25 452 411	507 66 4,013 823 163,138 3,57,693 1,630	Total.  833  152  8,675  1,704  346,871  4,75,633  3,095  25  452  411	24+25+1 Total toll month las  Mo  1. Balance on the 2. Tollage	ge of month 26 age of sa t year  emorandum of not recover lst of the month	6,11 me 6,11 f Tollage.  Red 4,592 6,11
Total car Total ing Total car Total pas Ton-m Estim Numb Rafts, Do., Estim Tollag	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons alleage ated value of cargo Rs. ber of passengers No. bamboos C. ft. bullahs ated value of rafts Rs. ge on boats ounded tollage on	86 4,662 881 183,733 1,17,940 1,465 25 452	507 66 4,013 823 163,138 3,57,693 1,630	Total.  833 152 8,675 1,704 346,871 4,75,633 3,095 25 452	24+25+: Total toll month las  Mo  1. Balance on the	ge of month 26 age of sa t year  emorandum of	6,11 me 6,11 f Tollage.  Red 4,592 6,11
d. Total car f. Total ing f. Total car Total pas f. Ton-n Pastim Rafts, Do., Estim Tollag Comp box	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons alleage ated value of cargo Rs. ber of passengers No. bamboos C. ft. bullahs ated value of rafts Rs. ge on boats ounded tollage on ats Rs.	86 4,662 881 183,733 1,17,940 1,465 25 452 411 3,236-5-3	507 66 4,013 823 163,138 3,57,693 1,630	Total.  833  152  8,675  1,704  346,871  4,75,633  3,095  25  452  411	24+25+1 Total toll month las  Mo  1. Balance on the 2. Tollage 3.	ge of month 26 age of sa t year  emorandum of  not recover lst of the month  Total	6,11 me 4,50 f Tollage.  Red 4,592 6,113 10,70
i. Total car ing Total car Total pas Ton-n Estim Numb Rafts, Do., Estim Tollag Comp bor Tollag	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons alleage ated value of cargo Rs. ber of passengers No. bamboos C. ft. bullahs ated value of rafts Rs. ge on boats ounded tollage on ats Rs. ge on rafts	86 4,662 881 183,733 1,17,940 1,465 25 452 411 3,236-5-3	507 66 4,013 823 163,138 3,57,693 1,630	Total.  833 152 8,675 1,704 346,871 4,75,633 3,095 25 452 411 6,109-12-3	1. Balance on the 2. Tollage 3.	ge of month 26 age of sa t year  emorandum of  not recover lst of the morandum per month  Total  paid i	6,11 me 4,50  f Tollage.  Red 0nth 4,592 6,117 10,70
i. Total car ing Total car Total pas Ton-n Estim Numb Rafts, Do., Estim Tollag Comp bor Tollag Total	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons alleage ated value of cargo Rs. ber of passengers No. bamboos C. ft. bullahs ated value of rafts Rs. ge on boats ounded tollage on ats Rs. ge on rafts ge on rafts tollage on boats per	86 4,662 881 183,733 1,17,940 1,465 25 452 411 3,236-5-3	507 66 4,013 823 163,138 3,57,693 1,630  2,873-7-0 3-8-0	Total.  833  152  8,675  1,704  346,871  4,75,633  3,095  25  452  411  6,109-12-3  3-8-0	1. Balance on the 2. Tollage 3.	ge of month 26 age of sa t year  emorandum of  not recover lst of the morandum per month  Total  paid i	6,11 dept.
4. Total car	number of boats plying go No. number of boats ply- passenger No. registered tonnage, go Tons registered tonnage, senger Tons alleage ated value of cargo Rs. ber of passengers No. bamboos C. ft. bullahs ated value of rafts Rs. ge on boats ounded tollage on ats Rs. ge on rafts	86 4,662 881 183,733 1,17,940 1,465 25 452 411 3,236-5-3	507 66 4,013 823 163,138 3,57,693 1,630  2,873-7-0 3-8-0	Total.  833  152  8,675  1,704  346,871  4,75,633  3,095  25  452  411  6,109-12-3  3-8-0	1. Balance on the 2. Tollage 3.	ge of month 26 age of sa t year  emorandum of  not recover lst of the morandum per month  Total  paid i	6,11 me 4,50  f Tollage.  Rs ced 4,592 6,117 10,700

<sup>\*</sup> The difference of Rs. 728-1-0, being the tollage paid by Messrs. House, Miller & Co., for February 1890, adjusted in April 1890, is now written back as per Examiner of Public Works Accounts, Bengal's No. 8217 of 8th September 1890.

Abstract for the month of August 1890 as compared with the corresponding month of the previous year.

	1890	-91.	1889	90.
	During the month.	To end of the month,	During the month.	To end of the mon
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A.
Tollage	6,117 3 3	29,766 12 6	4,509 12 9	25,056 5

CALCUTTA, The 11th October 1890.

G. A. G. Shawe, Under-Secy. to the Govt. of Bengai

# PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL. SOUTH-WESTERN CIRCLE.

CALCUTTA AND EASTERN CANALS.

Statement showing Quantities of Goods carried during the month of August 1890.

			TOTAL GOVERNME	NT AND PRIVATE.		Parv	ATE.	
aber of	DESCRIPTION.		Quantity-Tons.		Value.	Quantity.	Value.	BXE.
its.		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	REMARKS
410 2 41 280	1. Grain 2. Cotton 3. Oilseeds 4. Salt 5. Piece-goods	5,802 9 596 562	 33 4,751	5,802 9 629 5,313	5,65,484 4,750 74,862 4,83,518	5,802 9 629 5,313	5,65,484 4,750 74,862 4,83,518	ct page.
77 ,355 538	6. Metal 7. Building materials 8. Miscellaneous* 9. Fuel 10. Timber	1,779 6,572 9,184	67 1,107 3,007	1,846 7,679 12,191	28,404 8,37,932 89,749	1,846 7,679 12,191	28,404 8,37,932 89,749	For details, see next
	11. Bamboos							det
2,703	12. Total	24,504	8,965	33,469	20,84,699	33,469	20,84,699	* For
,647 raft	13. Total of same month last year.	{ 24,813 & 500 c. ft.	6,934	31,747 & } 500 c. ft. }	21,26,970	{31,747 & 500 c. ft.	}21,26,97	0
χ.		Up.	Down.	Total.				
	number of boats plying go No.	2,279 1,354	424 518	2,703 1,872	Total tollag	re of month	Rs. 21,069	A. 15
	number of boats plying seenger No.	459	7	465	Total tollage	of same mon	th 20,621	2
	registered tonnage, go Tons	78,580	21,804	1,00,384	Me	morandum of	Tollage.	
Total par	registered tonnage, ssenger Tons	816	17	833			1	
Ton-r	mileage	648,260	218,040	866,300			Rs.	Δ.
	nated value of cargo Rs.	14,11,779	6,72,920	20,84,699	on th	not recovered	he	
	ber of passengers No.	1,689	60	1,749	month		651	
	, bamboos C. ft.				2. Tollage	per month .	21,069	15
Do.,	bullahs "	***,**						
Estim	ated value of rafts Rs.				3. Total		21,721	3
Follag	ge on boats "	15,723-9-9	5,346-6-0	21,069-15-9	J. Total		21,721	
Domp	ounded tollage on ats Rs.				4. Amount	paid in ry during th		
Tolla	ge on rafts ,,				month		20,459	5
Total	tollage on boats per lamile Rs. tollage on rafts per cubic feet Rs.			0-0-4-66	5. Balance	due at the end		3 6
10		THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAME	******	******	of the	month	. I LOUL L	450000

# ARTICLES OF TRAFFIC INCLUDED IN ITEM 8 (MISCELLANEOUS). CALCUTTA AND EASTERN CANALS.

			TOTAL GOVERNMENT	AND PRIVATE.		PRIVA	TE.
Number of boats or rafts.	DESCRIPTION.	CONTRACTOR OF THE	Quantity-Tons.	The state of	Value.	Quantity.	Value.
ratis.		Up.	Down.	Total.	Rupees.	Tons.	Rupees.
204	(a) Jute	2,378		2,378	1,99,725	2,378	1,99,725
59	(b) Jaggery	530	26	556	62,300	556	62,300
6	(c) Sugar	37		37	9,450	37	9,450
3	(d) Tobacco	14	1	15	2,975	15	2,975
290	(e) Fish	70	3	73	20,365	73	20,365
16	(f) Hides	27		27	6,152	27	6,152
97	(g) Poultry	21		21	17,246	21	17,246
36	(h) Hay and straw	324		324	6,803	324	6,803
- 55	(j) Oil		883	883	1,23,625	883	1,23,625
56	(k) Earthenware	131	******	131	1,834	131	1,834
533	(m) Other misoella- neous	3,040	194	3,234	3,87,457	3,234	3,87,457
1,355	Total Miscellaneous	6,572	1,107	7,679	8,37,932	7,679	8,37,932

## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL. SOUTH-WESTERN CIRCLE.

TOLLY'S NULLAH.

Statement showing Quantities of Goods carried during the month of August 1890.

			PRIVATE.						
of	DESCRIPTION.	A COMPANY	Quantity-Tons.	Value.	Quantity.	Value.	ARKS.		
		Up.	Down,	Total.	Rupees.	Tons.	Rupees.	Value.	
	1. Grain 2. Cotton 3. Oilseeds 4. Salt 5. Piece-goods 6. Metal 7. Building materials 8. Miscellaneous* 9. Fuel 10. Timber 11. Bamboos	5,680 38 759 548  5,289 3,203 2,557 120 c. ft. 125 c. ft.	693  45 	5,680 38 759 1,241  5,289 3,248 2,557 745 c. ft. 125 ,,	4,99,573 20,285 75,625 1,12,937  20,963 3,40,489 19,458 1,862 15	5,680 38 759 1,241  5,289 3,248 2,557 745 c. ft. 125 ,,	4,99,57 20,28 75,68 1,12,98  20,96 3,40,48 19,46 1,86	8 6 8 2 2 2 2 2 2 2 3 2 3 2 3 2 3 2 3 2 3 2	
& 8.	12. Total	{ 18,074 & 245 c. ft.	738 & 625 c. ft.	18,812 & } 870 c. ft. }	10,91,107 { 18,812 & } 10		10,91,10	,91,107	
& ts.	13. Total of same month last year	{ 15,218 & 294 c. ft.	443	15,661 & } 294 c. ft. }	8,96,863 {	15,661 & }	8,96,86	3	
		Up.	Down.	Total.				Rs. A. P.	
cargo No.  Empty ,,  otal number of boats plying passenger No.		2,758	100	2,858	Total tollage of month— 24+25+26 8,177 13  Total tollage of same month				
		1,061	97	. 1,158					
		326	7	838	last year		7,239 3 0		
tal carg	registered tonnage, Tons	51,714	2,230	53,944	Memorandum of Tollage.				
	registered tonnage, enger Tons	647	15	662			1	Rs. A. P.	
on-mileage		415,793	35,680	451,473	1. Balance not recovered on the 1st of the				
imat	ted value of cargo Rs.	10,18,696	70,534	10,89,230	month		04 3 9		
mber	r of passengers No.	2,347	41	2,388	2. Tollage	per month	8,17	7 11 6	
fts, 1	bamboos C. ft.	125		125					
	bullahs "	120	625	745	3. Total		9.40	1 15 0	
mai	ted value of rafts Rs.	315	1,562	1,877	J. 101at		0,48	. 8,481 15 3	
lage	on boats ,,	7,619-0-6	550-5-0	8,169-5-6					
Out	IVS.				4. Amount paid into treasury during the month		to		
	on rafts ","	0-14-0	7-8-0	8-6-0			ne - 079	7,978 11 3	
	ollage on boats per Rs.			0-0-3-47			.,		
al to	ollage on rafts per 100 Rs.	·		0-15-4		lue at the en	d 503	4 0	

# ARTICLES OF TRAFFIC INCLUDED IN ITEM 8 (MISCELLANEOUS). TOLLY'S NULLAH.

			POTAL GOVERNMENT A	1	PRIVATE.		
Number of bosts or	DESCRIPTION.		Quantity-Tons.	Value.	Quantity.	Value	
rafts.		* Up.	Down.	Total.	Rupees.	Tons.	Rupees.
43	(a) Jute	265	10.00	265	22,230	265	22,230
61	(b) Jaggery	429	13	442	55,687	442	55,687
	(c) Sugar		******				
14	(d) Tobacco	116	22	138	26,950	138	26,950
168	(e) Fish	9	2	11	3,136	11	3,136
	(f) Hides						
12	(g) Poultry	7		7	1,590	7	1,590
183	(h) Hay and straw	428	- T	428	9,000	428	9,000
36	(j) Oil	308		308	43,125	308	43,125
100	(k) Earthenware	41	100 m	41	601	41	601
219	(m) Other miscellane- ous.	1,600	8	1,608	1,78,120	1,608	1,78,120
836	Total Miscellaneous	3,203	45	3,248	3,40,439	3,248	3,40,439

## ABSTRACT FOR THE MONTH OF AUGUST 1890, AS COMPARED WITH THE CORRESPONDING MONTH OF THE PREVIOUS YEAR.

	TRAPPIC,	1890-91.	TRAFFIC, 1889-90.		
	During the month.	To end of the month.	During the month.	To end of the month.	
	Re. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P	
Calcutta and Eastern Canals	21,069 15 9	91,064 7 6	20,621 2 6	99,736 15	
Telly's Nullah	8,177 11 6	40,496 3 0	7,239 3 0	33,626 0	
Total	29,247 11 3	1,31,560 10 6	27,860 5 6	1,33,362 15	

CALCUTTA,

The 11th October 1890.

G. A. G. SHAWE,

Under-Secretary to the Goot. of Bengal.

### CIRCULAR AND EASTERN CANALS.

Approximate Return of Traffic for the week ending Saturday, the 11th October 1890, as compared with the corresponding week of the previous year.

and the second	OF CARGO.		* WEEK E	NDING SATURI TH OCTOBER 18	DAY, THE 890.		DING SATURI H OCTOBER 18	
AATURI PERSONAL PROPERTY AND	OF CARGO.		Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	114	,	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy Jute Frewood Other articles	,		544 413 147 1,202	82,207 2,02,825 80,925 3,52,275	1,270 3,599 1,041 3,716	388 159 207 924	1,01,935 84,450 1,06,950 1,72,415	1,640 1,442 1,870 2,863
	Total		2,306	7,18,225	9,626	1,678	4,65,750	6,815

### Nalhati State Railway.

Statement showing Increases and Decreases in tonnage of Staples carried over the Nalhati State
Railway during the month of August 1890, as compared with the same month of the previous year.

			18	89.	18	90.	Tot	al.	Tonassas	- 38
STAPLES.			Up.	Down.	Up.	Down.	1889.	1890.	Increase.	Decrease
	Tries 1	nel E	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons,
20al		Of Seal	1,185	******	294		1,185	294	******	891
otton, raw	100000000000000000000000000000000000000	2 1	7	******	******		7	******	******	7
Ootton piece-goods—		200			1000	Share A Top	7.0		1 40 1 3	
1.—European		-	13	******	- ******	in the same of	13	******	******	13
Brains—		200	59	27	166	25	86	191	105	
2.—Rice		**	******		400	2	******	2	2	*****
3.—Gram 4.—Others			48	1	69	1	49	70	21	10000
Hides and skins—	CONTRACT I	115.00	A STATE OF STATE OF	(C-311-11) (C-11)		DOM: NOTE:	Tella I	1	0.00	200
1Hides of cattle-		2016		Edicine A				8.23		Will deal
$a \leftarrow Dressed$		122	*****	*****	44114	the state of	******	4	4	
2.—Skins of sheep, gos	its and	mail			1021467037	LEGISTER STREET			Decree S. J.	1000
animals-		200		1			1	******		1
		***	******	CONTRACTOR OF THE PARTY OF THE			4			The Control of the
ute- 2Ganny-bags and clot	hs				1		4	1	******	8
and -		1000	Charles 45-04			V-5- 100	1000	2 2		1000
1.—Stick		N. San	*****	******	******	1	******	1	1	*****
Metals—							1			
2Iron	1 1646	***	1	8	Courses to	9	6	9	******	
4.—Others	* ***	775	3				Charles A. H.	- THE R. P. LEWIS CO.	******	
Jils-		76 Ye	1		3		1	3	2	
1.—Castor 2.—Kerosine		***	3		5	2	8	7	4	*****
3.—Others	3/5C9(5QR1)		3		4,111		8	*****	*****	
Dilseeds-	5000001	13.18				SATURIUS TO			Service 1	GLOCKER
zMustard and rape		***	- 61		107	erion.	-61	107	66	*****
Provisions-		HOUSE.	5 10 10 10 10 10 10 10 10 10 10 10 10 10			BIRTH STATE		1		
1Ghee			8 9	4	1 3	3	6	6	******	2
3Others		2000	24	16	18	5	40	23	*****	******17
Railway plant and rolling-stock		12.00	69		81		69	81	12	
Salt	* ***	***					THE PARTY OF			100000000000000000000000000000000000000
2.—Indian			1	38	1	9	34	10	******	24
silk piece-goods-	19501115	200			Established in		The State of			
2Indian		***	******	2	*****	******	9	*****	Dinne	2
Sugar-		VSE I	200	Control State of		STEEL STEEL OF	10	O MANAGER IN		10
1.—Drained		100	10	******	23	****	13	23	11	
2Undrained		***	4	*****	AND DESCRIPTION		4	*****		4
l'imber		***			17	2	300	19	19	
Il other articles of merchandis	3	1	118	14	57	16	132	73		59
at the of more thanks	ADAME TO	148 144						-		1.041
	Total	***	1,611	101	846	72	1,712	918	247	1,041

	INCREASE			Tons.
Grains— (2) Rice		 	 	105
Due to greater export from intermediate stations.  (4) Others	PRESIDENT AND ADDRESS OF THE PERSON AND ADDR	 	 	21

			anti ni					Tons
Oil-seeds—							Basic to all Track	-
(2) Mustard and raj	pe			***	***	***		66
Due to high demand.								
Salt	***	***	10 mm ( ) ( )	***	10.00	144		12
Due to greater import.								
Sugar— *								43
(2) Undrained	***	***	***	***	***	***	***	11
Due to high demand.			a decidence					10
Timber	***			**	***	***		19
Due to there being no tr	affic und	er this head	last year.					
			DECREASE.					
			DECREASE.				0	***
Conl	***	444	444	***	***	***	****	891
Due to less import owing	to the st	toppage of g	goods traffic o	n account	of flood.			
Cotton piece-goods—						A SECTION		- 10
(1) European	***	***	***	***		***	***	13
Due to less import owing	z to the	toppage of	goods traffic	n account	of flood.			-
Railway plant and ma	terial	***		***		***	100	17
Due to less import owing	g to the	stoppage of	goods traffic o	n account	of flood.			
Silk, raw—							1 1	
(2) Indian	***	***	***	***		***		24
Due to less import owing	g to the s	toppage of	goods traffic o	n account	of flood.			100
Sugar—								
(1) Drained		***	***	***		***	***	10
Due to less import owing	to the s	toppage of	goods traffic o	n account	of flood.		A STATE OF THE STATE OF	

R. G. Mookerjee, Manager, Nalhati State Railwoy.

### Weekly Return of Traffic Receipts on Indian Railways.

### EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 4th October 1890, on 1,525; miles open.

	COACHING	TRAFFIC.	MERCHANDISE TRA	AND MINREAL	Other earnings		TRAFFIC	TRAIN-MIL	en Ros.
	Number of passengers.	Receipts.	Weight carried.	Receipts.	(estimated).	Total earnings.	Coaching.	Merchan- dise.	Total.
		Rs. A. P.	MDs. s.	Rs. A. P.	R6. A. P.	Rs. A. P.			
Total traffic for the week Or per mile of railway	215,179	2,35,474 8 0 154 5 9	19,45,540 30	4,55,316 1 0 298 7 6	17,383 3 10 11 6 4	7,08,173 12 10 464 3 7	64,319	78,811}	143,130
For previous 12 weeks of half- year	2,861,416	28,33,150 7 0	2,39,42,826 20	53,13,316 6 6	2,07,445 15 10	83,53,913 13 4	805,2401	984,811	1,799,08
Total for 13 weeks	3,076,595	50,68,624 15 0	2,58,88,367 10	57,68,632 7 6	2,24,829 3 8	90,62,086 10 2	869,5593	1,063,623}	1,933,181
COMPARISON.				911 9	N 54				
Total for corresponding week of previous year er mile of railway correspond-	243,4829	2,48,949 11 0	14,54,238 20	3,50,716 13 0	16,296 1 10	6,15,962 9 10	66,044	64,652	139,69
otal to corresponding date of previous year	3,848,780%	163 S 1 38,42,210 S 1	2,91,29,313 10	229 14 5 61,13,951 9 5		403 12 5 96,87,738 12 10	914,572	1,118,236	2,032,80

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works
Department Circular No. XXI, Railway, dated 23rd July 1883.

R×CRIP 5TH	TS FOR WEED OCTOBER 18	ENDING		of Por Week OCTOBER 18		APRIL 1889 TO 5TH OCTOBER 1889.			AP	RECEIPTS PROBLE 1890 TO 4T OCTOBER 1890.		Total increase in	Total decrease 1890.
Mean n:leage porked.	Receipts.		Mean mileage worked.	Receipts.		Mean mileage worked,	Total receipts. worked m		Mean mileage worked.	e Total receipts, works		1890.	1890.
1,525}	Rs. 6,15,963	Rs.	1,525}	Rs. 7,08,174	Rs.	1,5251	2,17,14,490	Rs. 527	1,525}	Rs. 2,01,81,017	Rs.	Bs.	Rs. 16,55

### PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 4th October 1890, on 573 miles open.

	COACHING	G TRAFFIC.	MERCHANDISE TRAF			Total esraings.	TRAFFIC TRAIN-MILES RUK.			
	Number of passengers.	Receipts.	Weight carried.	Receipts.	(estimated).	Total esraings.	Coaching.	Merchan- dise.	Total.	
		Rs. A. P.	MDs. 8.	B.s. A. P.	Rs. A. P.	Re. A. P.			Die .	
tal traffic for the week	13,500 256	8,850 11 0 154 11 9	21,265 30 372 0	1,854 6 0 32 6 8	28 4 0 0 7 11	10,733 5 0 187 10 4	2,447	459	2,90	
per mile of lattice of half-	*122,917	*62,087 14 0	†4,06,741 10	†26,022 5 0	\$472 <b>1</b> 0	88,582 4 0	13,393	7,267	20,660	
Total for 14 weeks	186,417	70,938 9 0	4,28,007 0	27,876 11 0	500 5 0	99,315 9 0	15,840	7,726	28,566	
COMPARISON.			200 4 8 11		-W-TIA		- 14-1			
til for corresponding week d previous year	10,593}	5,655 3 8	72,364 10	1,706 8 0	32 4 9	7,394 0 5	1,819	1,161	2,980	
among of previous year	1851	98 13 11	1,265 10	29 13 4	0 9 0	129 4 3			*****	
al to corresponding date of	197,019	1,10,401 15 6	6,89,882 0	31,289 3 0	500 7 0	1,42,281 9 6	19,496	10,093	29,589	

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, duted 23rd July 1883.

ARCEIPT 5TH	S FOR WEEK OCTOBER 18	ENDING 89.		TS FOR WEEK II OCTOBER 18		AI	L RECEIPTS FRO PRIL 1889 TO 5T OCTOBER 1889.			PRIL 1890 TO 4T OCTOBER 1890.		Total	Total
Mean ileage purked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.		Mean mileage worked.			Mean mileage worked.		Per mile worked per week.	increase in 1890.	decrease in 1890.
87 <u>1</u>	Rs. 7,394	Rs.	571	Rs. 10,733	Rs. 188	572	Rs. 2,56,277	Rs.	571	Ra. *2,26,060	Rs. 146	Rs.	Rs 30,217

<sup>\*</sup> Deducted Rs. 1,964 on account of difference between the approximate and audited figures to week ended 30th August 1890.

### TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 4th October 1890, on 221 miles open.

	COACHING	TRAFFIC.	MERCHANDISE . TRAFI		Other earnings	Total	TRAFFIC	TRAIN-MIL	es run.
	Number of passengers,	Receipts.	Weight carried.	Receipts.	(estimated).	earnings.	Conching.	Merchan- dise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. a. p.	Rs. A. P.	-36	13141	
stal traffic for the week	14,631	3,495 1 0 157 1 3	5,831 0	217 4 0 9 12 3	4 6 0 0 3 2	3,716 11 0 167 0 8	924	44	968
or previous 13 weeks of half-	*211,254	*51,108 8 0	†60,089 10	12,554 5 0	‡65 10 O	53,728 7 0	11,694	608	12,298
Total for 14 weeks	225,885	54,603 9 0	65,920 10	2,771 9 0	70 0 0	57,445 2 0	12,618	648	13,266
COMPARISON.									
tal for corresponding week of previous year of mile of railway correspond-	21,577%	5,624 12 9	5,614 20	194 9 0	5 15 3	5,825 5 0	925	43	908
as week of previous year		252 12 10		8 11 11	0 4 3	261 13 0		*****	****
previous year	248,3624	59,687 12 7	80,103 0	2,674 3 0	67 4 6	62,429 4 1	12,940	668	13,608

Approximate Statement of gross receipts of the Tarkessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

BCBIPT!	POR WEEK	ENDING 889.	RECEIP 4T	TS FOR WEEK H OCTOBER 18			PRIL 1889 TO U	TH		RECEIPTS PRO APRIL 1890 TO 4 GOTOBBE 1890.		Total	Total	
Mean silenge orked.	Receipts,	Per mile worked.	Mean mileage worked.	Receipts.		mile mileage Total receipts. w			Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in 1890.	decrease in 1890.	
M	Rs. 5,825	Ra.	221	Rs.	Rs.	222	Rs.	Rs.	221	Rs.	Rs.	Rs.	Ra. 2,773	

<sup>\*</sup> Deducted Rs. 2,226 on account of difference between the approximate and audited figures to week ended 30th August 1890.

<sup>\*</sup> Deducted No. of passengers 3,009 and H. Ditto Mds. 1,813 & added ... 48 on account of differences between the approximate and audited returns to week ended 30th August 1890.

Deducted No. of passengers 6,088 and Rs. 2,214 Ditto Mds. 12 and Ditto Mds. 12 and Ditto Mds. 12 and 10 Ditto Mds. 12 Dit

### EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Behar Sections.) Approximate Return of Traffic for week ended 27th September 1890, on 763 miles open.

Late Company Later	COACHING	TRAFF	ic.	MERCHAN		FFIC.	BR.	AL	Other ea			al	Тварріс	TRAIN-MILI	es ru
	Number of passengers.	Coach		Weight carried.		Receip	ots.		steam-		earni	ngs.	Coaching.	Merchan- dise.	Top
	1895	Rs.	A. P.	MDs.	8.	Ra.	۸.	P.	Rs.	А. Р	Rs.	A. P.			
Total traffic for the week Or per mile of railway	127,390 167	65,480 86	0 0	7,50,500 984		2,04,350 268			25,450 †9		2,95,310 363	0 0		36,468	25,
For pravious 12 weeks of half- year*	1,628,658	6,56,548	0 0	65,01,981	0	15,88,703	0	0	1,62,220	0 (	24,07,471	0 0	264,769	\$80,768	0413
Total for 13 weeks COMPARISON.	1,756,048	7,22,028	0 0	72,52,481	0	17,93,053	0	0	1,87,700	0 (	27,02,78	1 6 0	283,405	417,216	700,6
Total for corresponding week of previous year Per mile of railway correspond-	147,506	88,754	0 0	8,26,465 1,106		2,03,420 272	15.	-	32,704	0 0	4			87,311	9)
ing period of previous year Total to corresponding date of previous year	1,780,779	7,64,978		81,03,514		19,12,128		100	2,03,071			Water and		398,754	689

<sup>\*</sup> Audited up to week ending 9th and train mileage up to 30th August 1890, † Excluding steamer earnings.

### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

RECEIPT 28TH	TS FOR WEEK SEPTEMBER	ENDING 1889.	RECEIPT 27TH	SEPTEMBER 1	ENDING 890.	A	RECEIPTS PROPRIL 1889 TO 28 EPTEMBER 1889	RTH	A	RECEIPTS FRO PRIL 1800 TO 27 EPTEMBER 1890	TH	Total increase in	Total decrease is 1890.
Mean mileage worked,	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage,	Total receipts.	Per mile worked per week,	1890.	
747	Rs. 3,24,878	Rs.	763	Rs. 2,95,310	Ra. 387	710	Rs50,15,619	Rs. 272	759	Rs. *50,85,439	Rs. 258	Rs. 69,820	Rs.

<sup>\*</sup> Audited up to week ending 9th August 1880. BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 27th September 1890, on 125 miles open.

	COACHING	TRAFFIC.		MERCHANDISE TEAT		L	Other earnings	Martin 1		TRAFFIC	TRAIN-MILE	B RCK
	Number of passengers.	Coaching receipts.		Weight carried.	Receipts.	Ţ	/estimated).	Total earning		Coaching.	Merchan- disc.	Tota
and the second of	Sieter	Rs. A.	p.	MDS. S.	Rs. A.	Р.	Rs. A. P.	Rs. A	. P.			
Total traffic for the week Or per mile of railway For previous 12 weeks of half-	21,410 171	6,870 0 55 0		55,390 0 443 0	5,470 0 44 0		50 0 0	12,890	0 0	8,675	1,991	- 55
year*	296,574	91,499 0	0	4,03,444 0	29,052 0	0	2,393 0 0	1,22,944	0 0	42,300	24,901	12.
Total for 13 weeks	817,984	98,369 0	0	4,58,824 0	34,522 0	0	2,443 0 0	1,85,334	0 0	45,975	26,892	75
COMPARISON.				N. Walter i		K						
Total for corresponding week of previous year	28,020	13,510 0	0	99,984 0	9,897 0		130 0 0	22,537	0 0	3,537	3,591	
ing period of previous year Total to corresponding date of	224	100 0	0	800 0	79 0	0	1 0 0	180	0 0	*****		1
previous year	353,546	1,17,427 0	0	8,38,105 0	78,268 0	0	2,562 0 0	1,98,257	0 0	45,386	33,014	3

<sup>\*</sup> Audited up to 9th August 1890. Train mileage audited up to 30th August 1890.

### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railwa

	Total	M 1ST TEMBER	RECEIPTS FROM 890 TO 27TH SEP 1890.	APRIL I		L RECEIPTS VEG 889 TO 28TH SEP 1889.		1890.	TH FOR WEEK SEPTEMBER	RECEIP:	ENDING 1889.	SEPTEMBER	RECEIP2 28TH
n	increase in 1890.	Per mile worked per week.		Mean mileage worked.		Total receipts,	Mean mileage worked.	Per mile worked.	Receipts.	Mean mileage worked.	Per mile worked.	Receipts.	Mean mileage worked,
359	Rs.	Rs.	Rs.	GREATER Charles	Rs.	Ra.		Rs,	Rs.		Rs.	Rs.	
200		93	*3,00,842	125	116	3,78,104	125	99	12,390	125	180	22,537	125

Audited up to week ending 9th August 1890.

### DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 27th September 1890, on 86 miles open.

	COACHING	TRAFFIC.	MERCHANDISE A		Other earnings	Total	TRAFFIC	TRAIN-MILES	EUN.
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.	(estimated).	earnings.	Coaching.	Merchan- dise.	Potal.
100		Rs. A. P.	MD8, 8.	Rs. A. P.	Rs. A. P.	Rs. A. P.	1533		
traffic for the week er mile of railway half-	15,320 178	5,620 0 0 65 0 0	22,080 0 257 0	2,210 0 0 26 0 0	70 0 0 1 0 0	7,900 0 0 92 0 0	2,414	706	3,120
previous 12 weeks of half-	175,812	54,399 0 0	1,46,785 0	13,217 0 0	3,726 0 0	71,342 0 0	28,312	8,560	36,878
Total for 13 weeks	191,132	60,019 0 0	1,68,865 0	15,427 0 0	3,796 0 0	79,242 0 0	30,726	9,266	39,993
i for corresponding week of	16,467	6,868 0 0	56,795 0	3,412 0 0	460 0 0	10,240 0 0	2,547	1,006	3,551
rod of previous year  1 to corresponding date of erious year	191 192,869	74 0 0 60,263 0 0	660 0 2,56,144 0	40 0 0 18,107 0 0	5 0 0 3,089 0 0	119 0 0 81,459 0 0	32,351	7.38	44 116

Audited up to week ending 9th August 1890.
 Train mileage ditto ditto 30th August 1890

#### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

CRIPT 28TH	s for week September 1	ENDING 1889.		SEPTEMBER		A	RECEIPTS FRO PRIL 1889 TO 28 SEPTEMBER 1886	TH	10.000	RECEIPTS FRO APRIL 1890 TO 27 SEPTEMBER 1890	TH	Total	Total
an age sted.	Receipts.		Mean mileage worked.	Receipts.		Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in 1890.	decrease in 1890.
	Rs.	Rs.		* Ra.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
86	10,240	119	88	7,900	92	86	1,55,788	70	86	*1,61,103	72	5,365	

<sup>•</sup> Audited up to week ending 9th August 1890.

### NALHATI STATE RAILWAY.

Approximate Return of Traffic for week ended 27th September 1890, on 271 miles open.

	COACHING	TRAFFI	c.	MERCHAND		PIC.	BA		her ear	nin	gs	Total			TRAFFIC	TRAIN-MILE	is Run.
	Number of passengers.	Coach		Weight carrie	ed.	Receipt	8.	(	estimat	ed)		earnin	gs.		Coaching.	Merchan- dise.	Total.
	00.14	Rs.	A. P.	MDS.	8.	Rs	. P		Rs.	۸.	p.	Rs.	A. 1	P.			
traffic for the week	2,700 99	930 34	0 0	23,410 859			0 0		10 1	0		2,310 85	0		580	170	750
previous 12 weeks of half-	34,616	12,388	0 0	90,195	0	4,819	0 (		186	0	0	17,393	0	0	6,432	4,874	11,306
Total for 13 weeks COMPARISON.	37,316	13,318	0 0	1,13,605	0	6,189	0 (	-	196	0	0	19,703	0	0	7,012	5,044	12,056
l for corresponding week previous year mile of railway correspond-	3,790	1,414	0 0	7,463	0	530	0 (	,	17	0	0	1,961			586	449	1,035
period of previous year to corresponding date of	189	52	0 0	274	0	19	0 (	)	1	0	0	72	0	0			
evious year	39,332	14,342	0 0	1,24,338	0	8,225	0 (	)	612	0	0	23,179	0	0	7,468	4,001	12,369

Audited up to week ending 9th Angust 1980.
 Train mileage ditto ditto 30th August 1890.

### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

I S	S POR WEEK	ENDING	RECEIPT 27TH	SEPTEMBER		AY	RECEIPTS PRO RIL 1889 TO 281 EPTEMBER 1889	CH	A	RECEIPTS PROPRIE 1890 TO 27 SEPTEMBER 189	TH	Total	Total
-	Receipts.		Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.		Per mile worked per week.	increase in 1890.	decrease in 1890.
ACOUNT ACCOUNT	Rs. 1,961	Rs.	271	Ra. 2,310	Rs. 85	271	Re. 48,758	Rs.	271	Ra.	Ra. 65	Re.	Ra. 3,043

<sup>·</sup> Audited up to week ending 9th August 1890.

### BENGAL AND NORTH-WESTERN AND TIRHOOT RAILWAYS.

COMBINED SYSTEM.

Approximate Return of Traffic for week ended 27th September 1890, on 691 miles open.

	COACHING	TRAFFIC.		AND MINERAL AFFIC,	Other earnings (estimated),	Total	TRAFFIC	TRAIN-MI	LES E
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.	steam-boat. earnings.	earnings.	Coaching.	Merchan- dise.	To
	34	Rs.	- MDs.	Rs.	Rs.	Rs.		15059	
Total traffic for the week (on 691 miles open)	80,620 116'67	32,570 47:14	2,07,830 300'77	30,600 44.28	6,400 9°26	69,570 100:68	11,810	11,830	23,5
For previous 11 weeks of half- year	850,629	3,26,859	29,99,174	3,47,160	75,467	7,48,986	139,883	132,187	272,
Total for 12 weeks	(a)931,240	3,58,929	(5) 32,07,004	3,77,760	*81,887	8,18,550	151,698	143,517	295 8
COMPARISON.  Audited figures.  Fotal for corresponding week of previous year	73,748	27,002	2,11,003	17,987	7,146	52,135	10,200	11,193	213
er mile of corresponding week of previous year on 649 miles open otal to corresponding date of previous year	113°63 988,052	41.61	325·12 37,66,025	27°71 4,12,857	11.01	80°33 862,646	135,728	171,373	

<sup>\*</sup> Steam-boat earnings for the week, Rs. 4,820. Ditto to date, ,, 61,160.

### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal and North-Western and Tirhoot Railways.

	TS FOR WEEK SEPTEMBER			S POR WEEK SEPTEMBER		AP	RECEIPTS FROM IL 1890 TO 27 EPTEMBER 1890	TH		L RECEIPTS PRO APRIL 1889 TO I SEPTEMBER		Total	Total
Mean milesge worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week,	increase in 1890-91.	decreas 1890-y
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Ra.	Rs.
376	69,570	100.68	376	52,135	80.33	670	21,42,236	124'34	649	21,78,299	129.81		86,9

<sup>(</sup>a) Excludes 34,904 passengers, being traffic common to B, and N.-W. and T. Railways.
(b) Do. 1,44,594 maunds, ditto ditto ditto.

								C-1 9-	.0	
DA	RJEELIN	G-HIMAL	AYAN RA	ILWAY	COMPA	Y, LIM	ITED.		I	ls.
Approx	imate earnin	gs for week	ending 13	th Septen	nber 1890		100		11,	275
	onding peri						***		11,	
					100		The Mark		-	-
	Decrease		***	***				- 1.	4	27
			1 100	100		N	S State !	Rs.	Α.	P.
Receipt	s per mile fo	or week end	ing 13th Se	ptember	1890		***	221	1	3
Corresp	onding perio	od of 1889		***	****	***		229	7	4
	Decrease					•••	1	8	6	1
Receipt	s from 1st J	nly to 19th	Sentember	1990		10.00			36,7	97
	onding perio					***	100		17,1	
			10		ALCOHOLD TO THE	TO ME		18.00	-	_
	Decrease			•••		•••			30,3	46
Approx	RJEELIN imate earning conding peri	igs for week			aber 1890	*			R. 4,4	04
	1200		750	- 10	1000	***	***		0,1	,0
	Increase				•••	•••			5,64	7
Receipt	s per mile f	or week end	ing 20th Se	eptember	1890			Rs. 282	6 1	P.
Corresp	onding peri	od of 1889	1994	***		***		171		
					SECURITY DELPHAN		A STATE OF THE REAL PROPERTY.	A MUNICIPAL PROPERTY.	11	5
	Increase							110		6
Receipt	s from 1st J	uly to 20th				e <b>m</b> ail			u	6
Receipt	Increase ts from 1st J	uly to 20th			-		 	1,0	1,19	6
Receipt Corresp	s from 1st J conding period	uly to 20th	September	1890		e <b>m</b> ail		1,0	1,19 5,81	6
Receipt	s from 1st J	uly to 20th	September	1890	-		 	1,0	1,19	6

DARJEELING-HIMALAYAN	RAILWA	Y COL	MPANY,	LIMITED.		1	ls.
Approximate earnings for week ending 27 Corresponding period of 1889	th Septen	ber 189	90	<b></b>			171 109
Increase	•••						62
Receipts per mile for week ending 27th S Corresponding period of 1889	September	1890	1	=	Rs. 277 276	13	P. 10 6
Increase	-				1	3	4
Receipts from 1st July to 27th September Corresponding period of 1889	r 1890			.\ <u>.</u>			362 000
Decrease	***					24,	638



### SUPPLEMENT TO

# The Calcutta Gazette.

WEDNESDAY, OCTOBER 22, 1890.

### OFFICIAL PAPERS.

Non-Subscribers to the Gazette may receive the Supplement separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.

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### REPORT ON THE ECONOMIC AND ART SECTION OF THE INDIAN MUSEUM FOR THE YEAR 1889-90.

### REVENUE DEPARTMENT-MISCELLANEOUS.

Darjeeling, the 13th October, 1890.

#### RESOLUTION.

READ-

The Report of the Trustees of the Indian Museum on the Economic and Art Section of the Indian Museum for the year 1889-90.

The Report of the Assistant Curator of the Economic and Art Section of the In ian Museum was submitted to Government with remarks by the Trustees of the Indian Museum on the 6th September 1890.

2. As in previous years, the work was mainly confined to preserving specimens from the influences of climate and the ravages of insects, the insecure condition of the present building and the insufficient number of show cases making this a difficult task. In spite of every care, some samples of woollen goods and raw materials were so damaged as to be unfit for display. It is considered that air-tight glass-cases, with the air inside fully impregnated with napthaline, afford the only means of securing efficient protection, and provision for such cases has accordingly been made in the estimate of fittings for the new building now under construction. The attention of the Public Works Department will be drawn to the recommendation of the Trustees that the completion of this building be expedited.

3. The Lieutenant-Governor is glad to notice that the arrangements referred to in last year's Resolution, as to the exchange of specimens between the Economic Museum and the Jaipur Museum, have been effected. An interesting series of specimens was received from Jaipur, and the return collection is reported to be almost ready for despatch. A number of valuable specimens, not represented

before, was added to the Artware Court during the year, partly by donation and partly by purchase. Additions were also made to the exhibits in the Ethnological and Economical Courts. The total number of specimens in the register of each Court stood as follows on the 31st March, 1890:-

	. 4	Last number on 31st March, 1889.	Last number on 31st March, 1890.	Number of articles damaged during 1889-90.	Net increase during the year.
Art-ware Court		10,090	10,526	Nil	436
Economic		16,816	16,954	13	123
Ethnology		6,972	7,145	Nil	173

4. The most important works in which the Assistant Curator and his staff were engaged during the year were (1) the formation of a large and exhaustive collection of the fibres and mat and paper grasses of India for distribution to several institutions in the United Kingdom; and (2) the formation of comprehensive collections of the whole of the economic products of India for the Imperial Institute, London, the Indian Museum, and any other museums in India which Provincial Governments may recommend, and for which they may be prepared to purchase a set of specimens. No actual collecting was done during the year, but tabular statements of all the products required from the various provinces during 1890-91 were prepared, and the preliminary correspondence issued. It is proposed to make the collections pari pasu with Dr. Watt's Dictionary of the Economic Products of India, which will thus form an analytical and descriptive catalogue of the specimens. The proposal has the approval of the Lieutenant-Governor.

5. On the recommendation of the Bengal Committee of the Colonial and Indian Museum, who brought their work to a close during the year, a sum of Rs. 7,025, being the balance of the sale proceeds of exhibits, was placed at the disposal of the Trustees for the purchase of good specimens of Bengal art-ware to form a collection under the name of the "Asanullah and Swarnamayi" collection in commemoration of the liberal donations of the Nawab Asanullah of Dacca and the Maharani Swarnamayi of Cossimbazar towards the cost of the

Bengal Screen.

6. The Lieutenant-Governor notices with pleasure that the arrangement under which the accounts of the Economic and Art Museum were transferred to

the Trustees' Office on the 1st May 1890 is working well.
7. The lamented death of Mr. E. F. T. Atkinson, c.s., c.i.e., Chairman of the Trustees, which occurred in September, 1890, has deprived the Government and the Board of Trustees of the services and advice of an enthusiastic worker in the causes to which the Indian Museum is devoted. Sir Steuart Bayley desires to record his appreciation of the late Mr. Atkinson's zeal and labours in the pursuit of scientific knowledge.

By order of the Lieutenant-Governor of Bengal,

o the constitution of the control of

C. E. BUCKLAND,

Offg. Secretary to the Government of Bengal.

### RESOLUTION ON THE GENERAL ADMINISTRATION REPORT OF THE CHOTA NAGPORE DIVISION FOR THE YEAR 1889-90.

#### GENERAL DEPARTMENT-MISCELLANEOUS.

Calcutta, the 16th October, 1890.
RESOLUTION.

READ-

The General Administration Report of the Chota Nagpore Division for the year 1889-90.

The report, submitted by Mr. Grimley, who was in charge of the Division throughout the year, deals fully with all the prescribed topics, and it is necessary to touch in this Resolution only on some points to which the attention of the Lieutenant-Governor has been specially attracted. The price of food was high during the year, a condition favourable to the ryot in his character of a producer, but injurious to such labourers as are paid in money. The yield of the different crops was good, with the result that there was a large increase in the export trade. In the Lohardugga district there has been a distinct rise in the rate of wages, unskilled workmen now getting from 2 annas to 2 annas 3 pies a day against 1 anna 9 pies to 2 annas in 1887-88, and a similar tendency is observed in Manbhoom. Public health was better than in the preceding year, and there were also some minor causes at work to improve temporarily or permanently the condition of the masses, which in this Division is generally the reverse of satisfactory. The Commissioner writes:—

"In Manbhoom the opening of the Bengal-Nagpur Railway enabled the cultivators to take advantage of the high prices ruling in the neighbouring districts and to export their surplus stocks of rice, oilseeds, &c., at a substantial profit, while the excellent outturn of the lac crop materially benefited the people of Jhalda, Bagmoondi, and the rest of the western parts of the district. In Singbhoom the construction of the railway brought a great deal of money into the district, a good portion of which was earned by people of all classes from all parts of the district. In Hazaribagh, apart from the general prosperity consequent on the good harvests, the people of Gawan, Koderma, Baraganda and Giridih and their neighbourhood found ample work in the numerous mica, copper and coal mines at comparatively high wages. In Lohardugga the 'opening of the Bengal-Nagpur lines in the Division, the operations of the public works and road cess departments on a large scale within the district, extensive development of trade at the various centres and the local tea-gardens, have increased the demand for labour, and the consequent rise in the price of wages has greatly ameliorated the condition of the poorer classes.' The working of the Anglican and German Missionaries has also brought on a great change among the aboriginal races who at present constitute an important section of the population of the district. Much improvement is to be observed in their mode of building houses, and they take greater care to keep themselves neat and clean, and have a general tendency to give up some of their primitive habits and ways of living. A great advance is also noticeable in their style of clothing. The condition of the non-Christians too, as regards dress and dwelling-houses, has made a visible improvement within the past few years."

2. In this Division considerable importance attaches to mining operations, and it should be the object of all Government officers having the charge of estates, or being otherwise in a position of authority in regard to such matters, to afford every facility for prospecting, while refraining from making any settlement of permanent mining rights otherwise than in accordance with the prescribed rules. An economic survey is now being made of the Jharia coal-fields, and leases were granted for mica prospecting, under rules lately framed by this Government for the purpose, over 190 acres out of 370 acres applied for. The applications in regard to the balance should be promptly disposed of, if this has not been done already. In the principal coal mines the output was 564,971 tons against 630,527 tons in the preceding year; in the mica mines 1,333 maunds; in refined copper 320 tons against 218. In regard to gold the Commissioner writes:—

"In Lohardugga the aborigines of Sonapet have for a long time obtained small quantities of gold by washing the sand of the Sona river, but the quantities gathered have never been sufficient to pay them anything more than their daily wages. The Sonapet valley is almost entirely encircled by a belt of hills, and some of the reefs in these hills have been examined by mining geologists, and the favourable reports submitted have encouraged several persons to take up tracts of land with the view of forming mining companies. The Bengal-Nagpur Railway has brought the district of Singbhoom within reach of Calcutta and into prominent notice in commercial circles. Syndicates have been formed there with

the view of exploiting its mineral resources, and there are at the present time several important applications pending before me for licenses to prospect for minerals. In fact, signs are not wanting that this district with its mineral and forest products has a great future before it."

Of chief importance in connexion with the subject of public feeling is an agrarian agitation which has arisen among the Kols State of public feeling. and which has connected itself with a singular religious development. The Kols have for many years shown signs of discontent with their existing condition, especially in relation to the claims made upon them by landlords for excessive rents and for unpaid labour. At one time the feeling induced a few of them to put forward political claims which had to be unhesitatingly rejected. During the past year the dissatisfaction with the landlords' demands showed itself in some lawlessness, not of a very aggravated character, and in frequent refusals to pay rent or to give unpaid labour-symptoms which have caused the landlord class considerable uneasiness. A body of Jesuit missionaries have recently been extending their operations in the Division and have warmly taken up the cause of their Kol converts. Under this influence the number of conversions has been remarkable, though, as Mr. Grimley points out, in many cases "the enquiry established the fact that the conversions to Christianity were effected by the rough and simple process of depriving the new convert of his topknot, and also that those who allowed themselves to be thus easily converted to the new faith did so in the full hope and belief that they would be thereby enabled to escape from the exactions of their landlords, whether in the shape of rent, cesses or predial services." With the consent of the Government the Commissioner issued a proclamation specifying the amount of services which had been customary in past times and warning the zemindars to demand nothing in excess, at the same time urging the ryots to yield what was due. Other remedial measures of a more permanent character were discussed at a conference at Ranchi, and the Lieutenant-Governor is now awaiting a report from the Commissioner on them.

4. The thanks of the Lieutenant-Governor are given to Mr. Grimley for his careful administration of the Division during the year. Colonel Garbett, Colonel Lillingston, and Colonel Samuells all worked well as Deputy Commissioners, and Mr. Baker, of Manbhoom, showed administrative ability of an exceptional degree. The remarks of Deputy Commissioners as to their subordinate officers are not included in the Commissioner's report. This omission should now be supplied.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

Offg. Secretary to the Govt. of Bengal.

### Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 18th October 1890.

har sol	No.	District and return			Rainfall at Sudder Stationin inches.	
BE	NGA	L. Western D	istricts.	100	िस्त अस्य स्थित अस्य	Control on the art durate.  Life to take regions, and are to take out of the control of the cont
	1	Burdwan Culna	Oct. 18	, '90	3·37 2·37	Weather—seasonable. Prospects of amun and sugarcane good. Prices of common rice—
		Cutwa			5.52	Burdwan 16 Culna 15 per rupee.
	2	Bankoora	,, 18,	, '90	4.76	Weather—cloudy and rainy with occasional heavy showers. Copious rainfal during the week. Prospects of crops good. Common rice selling at 19 seer per rupee at the Sudder station and at Bishenpore.
DIVE.	3	Birbbum Rampore Ha	" 18,	'90	5·56 7·27	Heavy rain for three days of the week. It is beneficial to crops, which are already excellent. Price of sommon rice 17 to 18½ seers per rupee.
BURDWAN D	4	Midnapur	,, 18,	'90	4.50	Heavy rain. Prospects of rice crop fairly good. Over 12 inches of rain a Contai, and this has caused low-lying lands to be flooded, and will in parts do some loss. Prices of common rice—
URI					To the second	Srs.
-		white Alema	lang (d	Ty J	Section 25	Sudder 15 Tumlook 16 per rupee.
- 1				WE T	4, 415	Ghatal 16 per rupee.
-	5	Hooghly Serampore Jehanabad	., 18,	'90 	4·90 3·61 2·55	Continual rain throughout the week. Prospects of amun excellent. Outturn of jute expected to be 12 annas. Prices of common rice—  Srs.
						Sudder 13 per rupee.
			10	100	6.15	Jehanabad 16 )* Weather—rainy. Amun crop promises well. Other crops satisfactory. Price
1		Howrab Uluberiah	,, 18,		5.08	of common rice 14 seers per rupee.
1	6	Central Dis	Oct. 21,	290	Figures	Cyclonic weather with very heavy rainfell up to Thursday (16th) night.
	Ů	A Torgus	Oct. 21,		not given.	Weather bright since 17th. Prospects of all standing crops good except in the flooded area of thana Baduria in the Bussirhat subdivision. Common rice selling at from 12 seers 14 chittacks to 16 seers per rupee.
DITH.	7	Nuddea Kushtea Meherpore	,, 18,	'90 	7·28 4·37 11·94	Weather—cloudy and rainy. Amun rice doing well. Sowing of winter crops delayed owing to heavy rain. No change in the price of rice.
	1	Chuadanga Ranaghat	ingtage	::	6·51 5·07	Evangalities (India) - misselfer (India)
RESIDENCY	8	Khoolna Bagirhat Satkhira	., 18,		5.72 3.83 3.69	Weather—rainy. Condition and prospects of amus crop excellent except in the flooded than of Kalaroa and Satkhira.
PR	9	Jessore Jhenidah Magura	., 18,	'90 	6·70 3·97 3·52	Weather—rainy. Heavy rain during the week has retarded the sowing of rubbi crops and may probably do some injury to crops already sown.
1	NE S	Narail Bongong		=	3.50	
	10	Moorshedabad	,, 18,		5-89	Weather—most part of the week overcast and rainy; bright sunshine prevailing from this morning (18th). Prospects of amun favourable. In some parts it is in ear. Kalai has been much injured by the recent rain, but it is still being sown. The sudden rise of the Brahmini river has submerged a considerable portion of amun lands in Panchgram outpost in the Lalbagh subdivision. Rubbi being sown. Agricultural loans and gratuitous relief are still being given.
	11	Dinagepur Thakurgaon	,, 18,	*90 	14:38 16:93	Rain and storm on 14th and 15th. Prospects of crops continue good. Flood- have caused injury in the south, but to what extent not known until they subside.
Talkalla line al	12	Rajshahye Nattore Nowgong	" 18,	'90 	8·20 5·88 9·18	Strong gale accompanied with heavy rain. Weather clear since yesterday (17th). Winter rice and other standing crops thriving well. Jute steeping and gathering in progress. <i>Bhadoi</i> almost gathered in. (In last week's return for "22,000" bighas of paddy land destroyed by tornado read
DIVE.	13	Rungpur Nilphamari Kurigram	,, 18,	'90 	18·78 12·32 14·64	"2,200" bighas.)  Heavy rain with storms on the 14th and 15th. Weather hot and gloomy at intervals. Standing crops in low lands have suffered much from rain. Prospects, however, are good. Prices high.
RAJSHAHYR	14	Gaibanda Bogra Sherpur	,, 18,	90	15·85 11·54 9·56	Weather—gloomy, rainy and excessively damp till 17th; now gradually clearing. Excessive rainfall from 12th to 16th has done some more harm to the transplanted rice in the west and north-west. In the middle and the east of the district this crop is still in very good condition, and the outturn and the prospects of all other crops are good throughout the district. Kalai is being sown, and land is being ploughed for the spring crops. A considerable extent of grazing ground has been under water, and there has been temporary scarcity of fodder. Common rice is selling
	15	Pubna	,, 18,	'90	3.30	at 18 seers a rupse.  Weather—cool and bright. Prospects of amun and aus continue as before.  Winter sowings damaged by the late heavy rain.
19	16	Darjeeling Julpigoree	,, 18,	90	13-04	Report not received.  Weather—rainy and cool. Harvesting of jute going on rapidly. Standing crops doing well. No change in the price of rice.

### PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the

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			W	HEAT	r.		Nav 40	BARLE	γ,	1	Ri	JE, B	EST	son	r.	1	Ric	E, C	OMA	ton.		Jow.	AR OR (	HOLU
Number.	DISTRICTS.	Present return.		Next preceding return.	Corresponding return	of last year.	Present return.	Next preceding return.	Corresponding return of last year.	200	Present return.	Next preceding	n.	O continue ration	of last year.	1	Present return.	Navt preceding	d	Comesnondine raturn	of last year.	Present return.	Next preceding return.	Corresponding return
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4	Midnapore	10	8	11 0	18	8				11	0	11	0	12	0	15	0	15	0	14	0			
E	Hooghly	13	0	13 0	13	0		1		8	0	8	0	8	0	18	0	13	0	12	0			
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7	Nuddea	15	4	15 4	14	0	No Sale	20 0	16 0	11	10	12	4	10	51	13	10	14	8	12	5			
8	Khoolna	-			1.					12	0	12	12	11	2	14	4	13	8	11	10	***	,,,	
9	Jessore	18	0	13 4	12	0				11	0	11	0	9	2	13	0	14	8	14	0			
10	Moorshedabad	16	0	16 0	16	0				10	0	10	0	10	0	16	6	16	0	15	0			
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Present return not received.

At Rampore Haut retail prices of salt per rupee are:—Culna 10 seers, Cutwa 10 seers 6 chittacks, and Ramseguage 10 seers.

C In subdivisions retail prices of salt per rupee are:—Contai 9 seers and Ghatal 11 seers.

D In subdivisions retail prices of salt per rupee are:—Serampore 10½ seers and Jehanabad 11 seers.

D1 In subdivisions retail prices of salt per rupee are:—Barast 10 seers, Basirhat 9 seers, Diamond Harbour (at Magrabat) 10 seers, Barackpore 9 seers 2 chittacks, and Dum-Dum 10 seers,

E In subdivisions retail prices of salt per rupee are:—Kooshtea 10 seers, Meherpore 10 seers, Choosdanga 10 seers, and Ransghat 9 seers 2 chittacks.

F In subdivisions retail prices of salt per rupee are:—Satkhira 10 seers and Bagirhat 8 seers,

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turn.	Corresponding re-	Present return.	Next preceding re-	Corresponding re- turn of last year.
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### Head-quarter Station Bazars of the Districts of Bengal on the 15th October, 1890.

				1,2									ESALE P MAUND SEERS.		
	MAIZI Maizi		C.	AR OR ADJAN	THUR, PEA. dious.)		FIREW	7000.		SALT.			SALT.		
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															BENGAL. Western Districts.
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		1	13 8	13 8	10 8	160	0 160	0 160	010 8	10 8	10 8	3 10 0	3 10 0	3 10 0	Beerbhoom.
			11 8	12 0	12 8	120	0 120	0 160	010 8	10 8	10 5	3 13 0	3 13 0	3 14 0	Midnapore.
	-		11 0	11 0	13 0	120	0 120	0 120	0 9 0	9 0	9 0	3 12 0	3 12 0	3 11 6	Hooghly.
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E les	1		1		1	1		1		1					

In subdivisions retail prices of salt per rupee are : - Jhenida 9 seers, Magura 10 seers, Narail 94 seers, and Bongong 10 seers.

H In subdivisions retail prices of salt per rupee are :—Lalbagh 10 seers, Jungipore 101 seers, and Kandi 11 seer

J In Nattore subdivision retail prices of salt 9 seers per rupee.

K In subdivisions retail price of salt per rupee are: — Galbanda 8 seers. Kurigram 8 seers, and Nilphs

L At Scraigunge retail price of salt 10% seers per rupee.

In subdivisions retail prices of salt per rupes are:—Moossheegungs 813 seers and Naraingungs 10 seers.

In subdivisions retail prices of salt per rupes are:—Kishoregungs 8 seers, Jamaipore 10 seers, Sherpore 8 seers, and Netroken 8 seers.

## PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the Head-quarter

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6	BEHAR. Patna	"	1	12	Wh	ite.		6	17	0	18	0	22	0	11	0	10	0	10	0	16	8	16 1	12	14	0		19 8	21
7	Gya		15	12	15	12	14 1	12	20	0	19	0	20	0	10	0	9	0	10	0	17	0	14	4	15	0			
8	Shahabad .		16	8	16	0	14	0	19	0	19	0	17	0	9	0	8	0	9	0	16	0	15	8	12	0	20 0	20 0	20
29	Durbhunga .		. 15	3	15	6	16	0	16	8	15	8	16	61	13	0	12	0	11	6	16	8	16	8	17	0	*		
30	Mozufferpore .		16	0	16		14	0	19	0	20	0	19	0	9	0	9	0	9	0	14	0	14		13	0		-	
81	Sarun .		15	8	15	8	15	0	17	8	18	0	18	8	8	4	8	4	8	8	18	12	14	0	11	8		-	
32	Chumparun .		17	0	17	0	14	0	19	8	21	0	17	0	10	0	9	0	8	0	15	8	14	8	16	0			
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35	Purneah .		18	0	18		16	0					0		15	0	15	0	9	0	18	0	18	0	12	0			
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CALCUTTA, The 21st October, 1890.

<sup>\*</sup> Present return not received.

† Price of common rice at Jajpore 17 seers 1 chittack and at Kendrapara 20 seers 7 chittacks per rupee.

Ol At Cox's Bazar retail price of salt 8 seers per rupee.

At Feni Hât retail price of salt 8; seers per rupee.

P In subdivisions retail prices of salt per rupee are:—Buxar 10 seers, Sasseram 10; seers, and Bhabuah 9; seers.

At Samastipore retail price of salt 10 seers per rupee.

In subdivisions retail prices of salt per rupee are:—Hajipore 9; seers and Sitamarhi 10 seers.

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### Station Bazars of the Districts of Bengal on the 15th October, 1800-(concluded).

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Present return.	Next preceding return.	Corresponding return of last year.		Present return.	Navt negonaling	Iru.	Corresponding return	of last year,	Present return	Next preceding	return.	Corresponding return	of last year.	Present return.		return.	Chambandanding software			Present return.			Next preceding	reportu-		Corresponding return	of last year.	DISTRICTS.
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20 8	22 0	27 0	17	0	17	0	17	0	160	1 160		160	01	0 8	10	8	9	0	3	10	0	3	12	0	4	0	0	Chumparur,
21 0	22 0	22 5	17	13	17	13	18	10	147	0 147		147	01	o 8	10	8	9	7	3	11	0	3	10	0	4	3	0	Monghyr,
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28 0	40 0	40 0	26	0	34	0	13	8	12	0 .20		140	0	X 0	9	0	8	0	4	2	e .	4	2	0	4 1	0	0	Lohardugga
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In Subdivisions retail prices of salt per rupee are:—Beguserai 9‡ seers and Jan In Arrareah subdivision (at Ranigange) retail price of salt 10 seers per rupee. In Khoorda subdivision retail price of salt 9 seers per rupee. At Bhudruck retail price of salt 9 seers per rupee. At Daltongunge retail price of salt 8 seers 7 chittacks per rupee. At Govindpore retail price of salt 9 seers per rupee.

### PRICES-CURRENT (wholesale) of Food-grains, Firewood, and S.

						WE	ERA'	T.							B	BARL	EY.	X					R	CE,	BES	T S	ORT						Ri	CR,	COM	MON	
Number.	MARTS.			Present return.	THE PARTY OF THE P		Next preceding return.			Corresponding return	of last year.		and and and and	Present return.			Next preceding return.	The state of the s	Corresponding return	of last year.		Present return.	1100001			Next preceding return.	7	Corresponding return	of last year.			Present return.	The Parish		Next preceding return.		Corresponding return
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4	Naraingunge	1										1			200							3	0	0	3	0	0	3	12	0	2	12	0	2	12	0	8
5	Chittagong	1					8	3 (		3 15	2 (	0					***				1	3	4	0	3	6	0	4	12	0	2	8	0	2	10	0	2
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<sup>·</sup> Present return not received

CALCUTTA, The 21st October, 1890.

		PR	ICES	PER M	AUNI
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Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
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### in the undermentioned Marts of Bengal on the 15th October, 1890.

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MARTS		of last year,	;		Next preceding return.			Present return.			of last year.			Next preceding return.		The second second second	Present return.			Corresponding return of last year.			Next preceding return.			Present return.		or ast year,	Corresponding return		Next preceding return.		Fresent return.			of last year.			Next preceding return.			Present return.
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Published for general information.

C. E. BUCKLAND,
Offg. Secy. to the Goot. of Bengal.

# . Meteorological Report of the Province of Be

100	With the same of t		_					1	STATI	ON OB	SERVATIO:			3,000	
1			AIR	PRESSU	RB.	Win	ND.	730			TEMPERA	TURE.			
	DISTRICT.	Representative station.	Mean barometric height, 8 A.M.	Mean reduced to sea-level.	Variation from mean,	Prevailing direction.	Mean wind ve- locity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week,	Mean daily tem- perature of weak.	Variation from
1	5	Pooree Gopalpore	29-793 29-779	29°805 29°801	080	NNW	353 305	88°2 88°7	11th Oct.	71.6 73.3	18th Oct.	84'9	76°0 75°2	80.5	
	Pooree (	False Point	29.796	29.818	'081	Variable	233	87.9	11th ,,	73.6	17th	84'0	75.2	79.6	III.
	Outtack	Cuttack	29.742	29.824	069	NE	71	91'4	11th ,,	72.8	17th	86.0	75-3	807	
90	Balasore	Balasore	29'774	29'834	066	Northerly	87	88'4	11th ,,	78'8	18, 17	84.0	75.1	79.5	
1	South-West Midnapore ?	Saugor Island	29'814	29:841	'058	NE	264	89.2	12th ,,	70.0	14th	83*1	75.0	7910	NZ.
1	South 24-Pergunnans		29.685	29.836		1779			F 1 1 3						
48	Midnapore	Midnapore	20 000	20 000	071	NE	281	92.3	11th ",	73.1	17th	85 '4	75.0	80.2	
翻	Howrah	Calcutta	29.830	29.852	051	ESE	82	89.0	11th ,,	71.7	17th "	82'1	74.6	78'4	
30	Hooghly	Burdwan	29.756	29.859	053	E	98	91.6	11 & 12	74'4	14, 16 & 17	84.8	75 6	802	
gp		Bankoora	29.518	29*823	'080	Calm	83	90'1	11th	72'6	17th Oct.	841	73.7	78-9	
Ш	Beerbhoom }	Raneegunge	29.520	29.860	'048	North-	77	91.2	1011	72'4	141	84'6	73.7		
	West Burdwan )	100	1 1			Easterly	la la				14th ,,			79.1	
1	Moorshedabad	Berhampore	29*803	29.857	-:057	Easterly	92	90.1	11th "	72.8	14th ,	62.6	74.4	78'5	-
13	Nuddes	Krishnaghur	29.800	29 862	047	South- Easterly	189	91.8	11th "	72'3	14, 16 ,,	83.0	73.3	78 6	
	Khoolna	Jessore	29.824	29.858	053	SE	105	91.8	11th ,,	73.4	14th	84'6	75'9	80.3	-
1	Chittagong	Chittagong	29.817	29.908	'014	Easterly	67	89.7	11th	71.7	11, 13 ,,	86.6	73'6	80 1	-
1	hittagong Hill Trac	Demagini	4			1		Observ	rations not rec	eived.	B. She		100		
1	Backergunge	Barrisal	29'864	29.876	020	Calm, SE	80	90.8	11th Oct.	74'9	12-14 5,	84.7	75 6	80'2	10-
1	Noakholly	Noakholly	29'872	29.916	+ '024	SE	116	89.0	11th "	73.3	13th ,,	85'4	75.3	80'4	1
1	Furreedpore	Furreedpore	29'844	29'884	-'031	SE	109	88'0	11, 12 ,,	75.0	13th ,,	84'1	76'3	80-2	
1	Dacca	Dacca	29.850	29.873	033	· ESE	136	92.1	11th ,,	75'2	16th ,,	86.2	76'4	81.2	-
1	Commillah	Commillah	29.867	29.903	001	SE	82	51.3	11th ,,	73.3	17th .,	861	74'4	80.3	
13	(ymensingh	Mymensingh.	29.831	29*891	011	ESE, ENE	106	88*7	12th ,,	78.6	11, 14 ,,	83.0	74.7	78'9	
1	Bogra	Bogra	20.795	29'859	034	Calm	80	89.3	11th ,,	70.1	16th ,,	81.0	78'5	77.3	H
1	Pubna	Sernjgunge	29'827	29'874	· 036	Variable South-	70	89.1	11, 12 ,,	72'2	16th .,	83.7	74'0	78'9	
E	kajshahye	Rampore Beau-	29.790	29.872	+:036	Easterly NE	108	89.8	11th "	71·2 67·4	17th ,,	82.3	74.5	78'4	7
45	Maldah	Maldab	29.771	29.894	-'048	NE &	93	90.0	11th ,,	66.2	16th ,,	81.4	72.0	76'8	-
F	Dinagepore	Dinagepore	29.781	29.908	017	NNE. ENE	144	89.8	11 10	66.7	16th ,,	80'5	71.5	76:0	1
8 <b>1</b> 31	annot or o	Rungpore			Co. Fr	1	agrue!	Care			15, 16 ,,	80'8	71.9	76'2	-
1	Julpigoree}	Julpigoree	29*614	29.909	'020	9	7	88'4	11 & 12 ,,	62.1	17th ,,	79.9	68.1	74:0	-
1	Darjeeling Hill Tracts	Darjeeling	23.018	-	'048	ENE	109	63.6	11th ,,	46.5	15th	57.9*	49.0	53.2*	-
1	Purneah}	Purneah	29.757	29.887	028	NEA	109	89'2	12th ,,	67.5	15 & 16 ,.	80'4	711	75.7	-
10	Mozufferpore	Mozufferpore	29'691	29.875	-	Variable	163	89'8	12th "	66.8	15, 16	82.2	71'8	77:4	
,	Durbhungs	Durbbungs	29.781	29.903	-1023	ESE	147	90.4	11th ,,	68.0	16th ,,	82'4	71'5	77.0	-
1	Chumparun	Motihari	29.673	29.905	+ '003	Variable	128	90°2	11th ,,	65'8	16th ,,	83'3	70'6	76'9	
1	sarun	Chupra	29.680	29*878	027	E	86	90.3	12th ,,	69.7	15th ,	83.0	74'0	78.5	
١	(	Dehree	29.517	29*879	-1045	Calm	103	90.8	12th ,,	69.0	15, 16 ,,	84'8	71.9	78'3	
1	Shahabad	Buxar	29.634 29.676	29°881 29°874	-'034 -'032	NEly NEly	110	89.4 90.8	12th	66'8	15th	83'9	71:7	77:8	-
1	Gya	0	19.491	29'879	-'034	NEly N	26 121	89.9	tart	69.8	16th	84'4	72.2	78.3	
и	Patna	Bankipore	29.696	29'884	038	E	144	89.4	Treb.	69.2	17th	84'2	72'6	78'4	
Б	South Bhagulpore ?		29.696	29*862	Winds.						15 & 16 ,,	82 7	72.8	77.7	ER
ľ	Monghyr 3	Bhagulpore			038	E	115	89.2	11th	67.5	16th .,	80.7	71'4	76'0	
4	Sonthal Pergunnaha	Doomka	29.353	29'861	-'047	Variable	130	88.0	11th ,,	70.3	16th ,,	81'2	723	76:8	-
П	Hazaribagh	Hazaribagh	27.829	29.872	-1067	Northerly	185	84'9	12th	61.3	17th ,,	79.3	66.8	73.0	-
	Manbhoom)	Ranchee	27.709	29'866	065	NW	146	83'5	12th ,.	62.4	16th	78'9	63.8	72'4	
	Singbhoom	Chyebassa	29.064	29-839	060	Calm	46	89.4	11th	70.7			THE LET	70:0	-)
1		Sibsagar	29.611	20.083	+.051	NE	***	89.6	****	69.9	15 & 17 ,.	85.8	72.2	79'0	-3
1	Assam	Dhubri	29*804	29*925	008	ENE	312	87'2	1111	61.9	15th	82°0 78'8	71'8	74.7	-0
ы.	The state of the s						1		Titu "	11.11	15th .,	75 8		ALC: UNKNOWN STREET	

week ending Friday, the 17th of October 1890.

	2725		0.7		A PARTY ACCOUNT	DIST	MOT OB	SERVATIO	Mo.	PS T	aller of	E RIVER IN	Works to the
week.	* ·		1	igue.			RAI	NPALL.		200			
Week	f week station.	OF	WHEK.	Sir	ace 1st of mo	onth.	Sin	ce 15th May	1890.	re.	iber	Representative station.	DISTRICT.
at 8 A.M. for	Rainfall of observing st	Mean for district.	Normal mean.	Mean for district.	Normal mean,	Variation.	Mean for district.	Normal mean,	Variation.	Average number of rainy days.	Normal number of rainy days.	Salva.	
8	9°02 6°72		2.4		4.80			48:91			2.5	Pooree)	
9	9:33				1				7.24	-176		False Point	Pooree
3	4.30	6:35	1.31	6.57	3.22	+3.35	60-62	47.27	+13'35	4.8	1.9	Outtack	Outtack
	8'41	7:68	1.28	8.02	3.66	+4'39	59:17	50°17	+9.00	4'8	1.8	Balasore	Balasore
	13'13	12'88	2.62	15.02	4'47	+0.55	62:30	57'65	+4'65	6.0	1.9	Saugor Island	South-West Widnesses
	4'47	4'36	1'56	4.60	2.93	+1.67	49-87	49:17	+0.70	5.3	1.3	Midnapore	South 24-Pergunnahs Midnapore
		-			The Law Town				77.73	(A)-		ationapore	24-Pergunnaha
	5.72	6.65	1.61	6.89	3.01	+3.88	54.68	49.49	+5.19	5.2	1.2	Calcutta	Hooghly
	3.37	3.75	1.60	4.72	2.87	+1.85	60.85	44'68	+16-21	5'3	1'3	Burdwan	Burdwan
	4.74	4.87	1.22	5'34	2.26	+2.78	52.01	50*40	+1.61	5'5	1'8	Bankoors	Bankoora
	7.53	6:97	1.36	7:32	2.70	+4'62	62.89	50.65	+12.54	5'8	11	Raneegunge	Beerhhoom
	2.89	6'74	2.02	7.15	8.64	+3'51	59:93	49*05	+10.88	5'5	1'4	Harbannana	West Burdwan Moorshedabad
	7'14	7:88	1.28	8.21	3:03	+5'48	54.76	47*11	+7.65	5'4	1'8	Kriehnachus	Nuddea
	6.34	T.A.	1.20	5'52	8.00	+2.52	51'14	50*76	+0.38	5'4	1:5	A STATE OF THE STA	Jessore
8		5.02				-2'04	116.54	108:32		543	50m1	Jessore	Khoolna
	2.74	1.88	179	3:05	5'30	-2'25	71.65	75.97	+7'92 11.3	3.0	2.0	Chittagong	Chittagong
	0.00	2.65	1.94	5.87	3.97	+1'90	66:36	72.79	-6'43	5-3	1'8	Demagiri	Chittagons Hill Fracts
	3.55	4.13	2"	2.83	4:95	+0'87	93.87	101'74	-7.87	4'0	1.9	Barrisal	Backergunge
	6.01	3.33	1	4.23	8'83	+0.89	42'11	53.42	-11'31	4.7	1'4	Noakholly Furreedpore	Noakholly
B	0.96	1.62	1.	2.23	3.17	-0.94	55'24	57.47	-2.23	6.8	12	Dagge	Dacca
	4'51		1		3'84			65.66		4	1.3	Commillab	Tipperah
Ī	4'60	5'47	1'96	7.02	4.00	+3.02	78 67	66'71	+6.98	4.6	15	Mymensingh	Mymensineh
	12:28	11'07	1'61	11'14	3.28	+7.56	78'88	55'67	+22.6	5'8	1.3	Bogra	Bogra
1	6.67	4.99	1.84	5.27	3.50	+1.98	54.02	51.21	+2.81	2:2	14	Serajgunge	Pubna
	8.13	8.83	1.20	9.68	3.63	+6.66	74'59	51.96	+23.63	5.7	1'4	Rampore Beauteal	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	6.71	7.53	0.89	7.60	2.81	+4*79	62-12	52.21	+9'61	5.5	1'2	Maldah	Maldah
	14-44	11.25	115	11'43	3.06	+8.37	81.73	55.62	+26'11	44	11	Dinagepore	Dinagepore
	20.38	16'45	1.61	18'14	3.99		750-00	72.18	+34'29	4.3	11	Rungpore	Rungpore
P	13.85	12.78	1'35	14.96	4:20	+10.76	154'49	108'05	+46'44	4'2	1.2	Julpigoree	Julpigoree
)	10'17	10:44	1.59	13.87	4*25	+9'57	165'12	117'40	+47.72	5.0	1'4	Darjeeling	Darjeeling Hill Tracts
,	6:22	5'81	0.83	6.53	2*70	+3.23	80.67	57:07	+23.60	3'2	1'0	Purneah	Purneah North Bhagulpore
	1:32	1.69	0.20	1.71	2 66	-0.95	52:40	42'13	+10'36	5.7	0.7	and the state of the	Mozufferpore
1	2:35	1.73	0.20	1.73	2-27	-0:54	57.62	43 21	+14'41	8.7	0.7	Mozufferpore Durbhunga	Durhhungs
	6.58	2.39	0.21	5.21	3'27	+2'24	68:31	46'10	+2275	8.0	0.8	Motihari	Chumparun
	1:93	1'48	0.64	1'48	3.01	-9'13	\$3:60	41.07	+12'53	2.3	0.9	Chupra	Sarun
	0.32	V.		13.15	100	Property of	127				5.49762	Dehree	
9	1'92	1 09	0.23	1.27	2'43	-1'16	49.22	38.17	+11'35	2.0	0.8	Buxar	Shahabad
6	2°18	0.41	0.23	0.42	2 20	-1.87	56.92	40.03	+16.90	2'3	0.7	Arrah	Contract of the Contract of th
6	1'02	1.27	0.24	1'34	2'34	-1.00	48'10	39.21	+8.20	3.3	0.0	P	Gya
4	5'39	3'07	0.22	3.17	2.25	+0.92	52.25			THE REAL PROPERTY.			South Physioleges
				2000				41'48	+70.77	44	0.8	Bnagu)pore	Monghyr
0	11.45	9.84	0.86	10.12	2.84	+7'31	63.51	49.25	+13.96	2.8	1.3	Doomks	Sonthal Pergunnahe
3	0.86	DIDI	0.81	1.63	1.93	-0.29	47.01	48'53		The state of	1'3	Hazaribagh	Hazaribagh
	1.22	0.82 3.53	0.76	3:31	2:40	+0.85	41.43	46'40 45'32	-3.89 +0.01	5.2	1.5	Rauchi	Loharduggs Manbhoom
8	0.91	3-28	0.68	8:31	1.77	+1'84	141:43	49 24	-7'81	5.0	1.2	Unyebassa	Singbhoom
3	1.81	est?		200								Sibsagar	in-state of
0	5.71		3 4 3		130							Dhubri	Assam
1	2.36	1000	III EVEN	1928 N	100		1797	March St.	NU ATTOR	STORESELVE		silchar ]	

Tax. The variations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.

And the part of the axy covered, the whole sky being denoted by 10. Under the head District observations of rainfall the normal means of the district are the numerical average of the rainfall return received in the district, i.e., from total rainfall at the subdivisional

Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 17th of October 189

					R	AINPALL	100	0167		To	TAL				
Meteorological division.	District.	Station.	Saturday, 11th October.	Sunday, 12th October.	Monday, 13th October.	Tuesday, 14th October,	Wednesday, 15th October.	Thursday, 16th October.	Priday, 17th October.	Number of rainy days.	Rainfall of week,	Total rainfall since 1st of month.	Average total rain- fall from 1st of month.	Total rain- fail since 15th May 1890,	An Iron Ma
Oktosa	Pooree	Pooree Khurdah Banpur False Point Gop Satpara Pipli	0°50 0°16 0°73 1°50 0°25 1°90	2:95 1:62 8:94 2:14 3:20 4:05 2:64	4°39 2°63 1°67 4°70 2°46 0°35	1.29 0.23 0.17 1.63 0.25	1.06		0.11	5 4 6	8·49 5·29 9·33	8 63 6 94 9 93	4°49 4°22 4°06 6°45 9	64°43 63°10 61°63	
	Cuttack	Jagatsingpore Banki Cuttack Kendrapara Jajpore Dharmsala Salipore	1.78 0.02 0.19 2.20	1.50 1.67 2.40 3.77 3.30	1'90 1'50 5'35 2'63 1'26 2'40 0'64	0°30 0°18 0°63 0°10 0°27	0.60	0.80	0°12 0°06 1°40	6 6 4 4 4	6.88 3.50 8.44 6.69 6.23	6.88 4.17 8.44 7.13 6.23	4'16 2'50 2'96 3'42 3'10	59:50 60:54 80 10 52:39 52:60	-
	Balasore	Chandbali Bhuddruck Sorah Balasore Jellasore Baripodah	1.30 0.08	5:00 2:90 3:15 1:29 2:62	4.88 1.43 1.00 1.87 2.30 1.77	11:04 0:28 0:35 1:83 3:54 0:28	1.20	1.91 0.70 0.94 1.80 0.46	0°20 0°78	3 4 5 6	7:83 7:41 5:75 8:61 7:04	7'86 8'56 5'85 8'69 7'29	4.44 2.89 3.65 4.08 3.84 3.07	50°97 54°49 59°59 65°89 70°16	SARAGE
SOUTH-WS-T BRNGAL.	Midnapore	Contai Saugor Island Tumlook Midnapore Ghnttal Kukrahaty Garbetta	0.40	2:40 1:17 0:50 0:02 1:53	1'72 1'49 1'10 0'92 0'15 1'84 0'74	9°40 4°80 4°00 1°33 1°62 5°76 1°80	0°22 4°75 0°50 0°09 0°34 0°25	1.78 0.92 0.70 1.65 0.22 0.12	0°60 0°60 0°18 0°06 0°59	7 5 6 4 6 6	16.52 13.13 6.90 4.50 1.68 9.15	16'76 18'09 7'10 4'72 1'96 9'15	4'48 5'71 2'63 3'04 3'12	62°43 63°94 57°90 47'09 44'61 49'19	Been .
	24-Pergunnahs	Diamond Har- bour		0.20	1°20 0°87 0°94 1°40 0°72 0°59 0°65	5.28 2.37 1.33 1.24 1.55 2.25 2.87	0.68 4.02 2.12 1.20 1.12 1.25 3.10	0 22 4 58 0 43 3 05 2 14 1 30 1 31	1.05 0.71 1.30 0.35 8.82 4.12 0.24	6 5 6 5 6 5	8'99 12'85 6'12 7'20 9'35 9'74 8'17	10°22 13°39 8°17 8° 5 11°39 11°19 9°91	3°22 9 2°88 2°64 2°99 3°30 3°28	60°54 60°55 60°40 50°55 55°10 54°76 57°60	B HORD
	Howrah Hooghly	Howrah Mohesreka (Ooloberiah) Serampore Hooghly Jehanabad	*****	0°23 1°38	0°86 0°60 0°97 0°27 0°11	1°25 8°15 1°21 0 66 1°49	1.63 1.10 1.10 1.16 -0.13	0°45 0°23 1°25 0°79 0°21	1'96 0'02 2,23 0'61 0'15	5 5 6 6	6°15 5°10 7°09 4°87	6.8 2.1 6.	2'96 2'86 3'09 2'83	51°23 59°57 53°84 51°98	100000
	Burdwan	Culna Burdwan Cutwa Raneegunge Mankur	0.57	0°04 1°31 2°07	0.78 1.09 1.17 0.80 0.86	0.89 1.30 0.21 3.02 1.62	0°22 0°51 2 83 1°53 0°78	0'40 0 40 0'11 0'09	6.01 0.55	6 5 7 4 5	2 66 9.37 3.87 5.52 7.53 2.69	3 3 6 66 7 54 3 38	8·27 2·93 2·76 2·90 2·57	51°57 54°11 64°97 63°56 59°15	Dana G
	Bankoora	Bankoora Bishenpore Maliara Khatra Indas Kotalpore Anda Gangajalghati Kaipore Sonamukh:	0°14 0°92 0°09 0°61	0:32 0:24 0:03 0:18 0:21 0:83 2:40 0:59 0:12	0'76 1'32 0'85 1'38 1'40 0'33  0'35 2'12 0'86	3:34 1:89 2:72 3:30 1:71 0:79 3:00 2:80 1:98 1:96	0°30 0°55 0°83 0°10 1°13 2°38 3°00 0°13 0°65 0°99	0.04 0.13 0.10 0.70 0.70 0.00 0.10	0.01 0.02 0.12	5 7 6 4 6 7 4 6 5	4'76 4'31 5'45 4'96 4'79 4'88 8'80 3'87 5'35 4'51	4.76 4.66 5.92 6.12 6.74 6.68 9.20 3.87 6.13 4.51	3*00 1*69 2*56 2*97 9	47'80 57'76 50'95 50'23 40'06 50'97 65'94 65'11 63'75 53'29 52'74	TOTAL STREET
	Beerbhoom	Bh. Scory Hetampore Rampore Haut Botpore Murarai	1.77		0°92 0°79 0°85 0°57 1°10	3°06 2°79 4°50 2°76 4°71	1'39 2'55 1'64 0'60 1'30	0°10 0°12 0°28 0°10	0.08	5 5 6 4 3	5.56 8.02 7.33 4.03 7.11	5.87 8.63 8.08 4.03 7.11	2 57 2 49 8 23 9	61'45 59'15 72'36 56'23 56'46	Billip
	Nuddes	Ranaghat Kishnaghur Chooadanga Meherpore Kooshtes		0°25 0°30 0°75	0°76 0°93 1°01 0°10 0°49	0'90 0'49 1'05 0'56 0'60	1'74 0'56 0'35 6'33 0'88	1'67 2'37 3'80 4'20 2'40	1.66 2.68 0.85	5 6 5 5	6'73 7'28 7'36 11'94 6'08	7·27 7·55 7·77 18·19 6·75	2*67 8*40 8*03 2*57 3*51	55°23 61°34 46°58 58°80 51°85	-
	Khoolna	Satkhira Bagirhat Khooina Nakipur Rampal		0.40	0°34 1°18 0°75 2°30 1°25	1'89 1'01 1'96 1'89	1°18 0°48 1°29 0°71 2°03	0°24 1°21 1°33 0°90 2°51	076 0'99 1'93 0'23	6 4 6 5 6	4'81 3'83 5'59 7'80 9'00	5'44 8'83 6'75 8'18 9'16	8:30 3:85 2:64 P	55°53 50°99 51°64 68°68 63°50	10 to
	Јевоге	Narail Jessore Jhenidah Magoorah Bongong		0.02	0'81 0'45 1'26 0'77 0'75	1'00 1'08 1'50 0'44 0'85	1.15 1.76 0.22 1.11 1.90	0°54 2°47 0°99 1°20 2°65	0°15 0°56 0°85 0°14 0°25	5 6 5 5 6	3'65 6'34 4'83 3'66 7'45	4'41 7'03 4'97 3'66 8'05	1 97 2 75 3 36 2 76 3 30	43.85 56.76 53.18 2.72 46.21	-
2014	Moershedabad	Kandi Berhampore Laibagh Azimgunge Jungipore Laigunge Jiagunge Jiagunge Akbriyunj Palkabari	0.82	0.08 0.06 0.16 0.15 0.75 0.70	0.68 0.29 0.99 0.42 0.24 1.80	1'18 2'29 2'10 2'90 2'95 2'35	1°36 2°10 2°43 1°63 2°54 2°45 1°40 2°80	0°84 1°18 1°25 2°15 1°60 2°40 2°60 0°30	0°16 0°20 0°08 0°15 0°28	4 5 7 6 5 6 6	3:56 5:89 7:03 6:55 8:11 9:30 7:18	2:81 6:72 7:14 6:55 8:37 9:30	3°23 3°88 3°96 4°10 2°70 3°98 ?	64'00 58'35 63'22 57'97 51'24 64'70	-
EAST BENGAL		Cox's Bazar Chittagong Kutubdia Satkanya	0'47 0'50	0.13	0.53 1°35 0°55		-		0°35 0°83	3 2	2.52 1.01	1·11 3·25	4*79 6*17 P	125*77 100*19	11
	Chittagong Hill Tracts Backergunge	Rangmati Ruma  Patuakhally Perozepore Burrisal Buola	0°22 1°45	0°95  0°87 0°21 0°10 0°70	4°50 0°86 2°12 2°33	1'00 0'91 0'78 0'76	0°15 0°27 0°75 0°15	0.48	2°05 0°22 0°64 0°15 0°67	5 5 5 5	1'80 3'50 6'86 3'37 3'30 4'57	2.61 3.50 8.41 3.50 4.46 6.84	5°19 5°47 4°36 4°09 3°26 4°17	67-90 75-41 77-93 61-85 63-15 63-02	-

tement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 17th of October 1890 -contd.

VI.		2.7			B	LAINVAL	L.			T	DTAL				Average
ploxical	District.	Station,	Saturday, 11th October.	Sunday, 12th October.	Monday, 13th. October.	Tuesday, 14th October.	Wednesday, 15th October,	Thursday, 16th October.	Priday, 17th October,	Number of rainy days.	Rainfall of week.	Total rainfall since is: of month.	Average total rain- fail from 1st of month.	Total rainfall since 15th May 1890.	rainfall from 15th May to date.
BENGAL ield.		Gournaddi Bauphal		0°55 0°86	2°85 8°50	0.20	0.60	0:48	0.08	4 4	8'98 4'94	3.98 6.4	?	41°15 71°06	* ;
	Neakholly	Nonkholly Fenny Harishpore Rampanj	0.08	2.20	4·75 1°95	0.32 0.22		0°28 0°23	0.13	5 3	5.20 5.20	5:90 3:70	5'29 4'39 9	88°16 99°67	103°13 100°24
	Furreedpore	Madaripore Furreedpore Goalundo		0°25 0°57	6.13 5.30	0.73 0.15	1°22 0°57 0°50	1°45 0°93 0°81	0.02	4 5 5	4*02 2*61 3*29	4:31 3:96 4:38	3°21 3°18 3°60	87:51 46:03 42:79	53'68 55'72 50'84
	Dacca	Munshigunge Dacca Naraingunge Manickgunge Joydebpore	0.02	0°11 0°85 	0°26 0°41 0°29 1°21 0°30	0.25 0.11 0.28 0.19	0°20 0°10 0°28 0°54 0°06	0°82 0°60	0°20 0°05 0°01	5 6 2 6 6	0°87 2°00 0°57 3°03 1°62	1.07 3.12 3.02 0.96 2.45	4'00 3'08 2'70 2'86 P	54'68 51'64 58'41 56'23 62'88	06 90 56 62 58 21 47 90
	Hill Tipperah Tipperah	Agartola Comilla Chandpore Brahmunberia Ramchandra-	-	0.94	1°55 2°57 1°05 0°30	0°56 1°02 0°32	0.08	0.10	0°34 0°12	4 2 3	4°40 2°54 0°72	3.75 4.50 2.72 1.e7	3°38 3°24 5°24 3°51	63°53 54°38 50°34	57 89 72 97 72 80 59 10
		pore Nasirnagar Daudkandi Kasba Laksham	0.17	0.21	0°46 0°79 0°05 1°82	0.12	0.02	0.04		4	1°03 1°82	1.03 1.82	5 5 5 5	26°26 67°15	******
	Mymensingb,	Kishoregunge Atia (Tangail) Mymensingh Jamalpore Netrokona Subornakhally Burgapore Sherepore Town	0'40	0.70	0°21 1°76 0°15 0°73 0°60 0°66 0 69 0°67	0.06 0.80 0.80 0.80 0.80 0.50 1.30	0°57 0°44 1°59 0°18 0°65	1.20 1.48 2.34 7.45 0.87 3.95	0°21 0°57 0°37 0°08 0°35	3 7 4 4 5	1.62 5.60 4.10 4.85 6.14 8.49	4*20 6*90 4*69 7*55 6*19 9*15	4*25 3*63 4*20 3*85 4*03 ? P	68°97 53°82 73°81 93°17 57°16 67°08	67-69 53-36 71-55 63-08 77-97
BIN BOAL	Pubna	Pubna Serajgunge	0.10		0.48 1.15	0°32 1 48	0.24 1.16	1·29 2·87	0.21 0.01	5 6	3°14 6'83	3'53 7'00	3.48 3.09	40147 62166	51°87 50°30
SOAL.	Bogra	Sherepore Nowknilla Bogra Panenbibi	0.36	0.39	0.81 0.20 0.28 0.58	3°41 0 72 4°35 2°00	2·10 2·77 3·32 7·28	3.74 5.27 3.32 2.00	0.48 0.23 0.31	5 5 5 6	10°04 9°62 11°80 -12°83	10°07 9°62 11°80 13°05	3:30 4:26 2:96 3:80	77:16 65:80 78:98 91:40	56'34 52'40 59'14 54'75
	Rajshabye	Beaulesh Nattore Naogaon Lalpore Manda	0.01	0°87 1°63 0°20 0°20	2*03 0*20 0*62 0*93 5*20	2:18 1:88 3:67 0:90 3:10	1.03 1.45 2.16 2.80 3.17	1'87 2 35 1'10 0'85 0'20	0°71 3°20 0°48	7 5 5 6	8°20 9°08 9°18 6°16 11°79	10°31 9 16 9°57 8°18 12°19	3'65 3'56 1'85 P	71 22 86 45 66 09 51 90 47 26	51'44 53'05 51'38
	Maldah	Maldab Chanchal Gajo! Sibyanj		0.10	0°17 0°37 0°9 0°79	9.95 1.38 1.50 2.44	*2:34 6:25 2:83 3:22	0°70 0°18 1°00 4°80	0°45 0°15 0°19 1°55	6 5 5 6	6.73 8.33 6.42 13.10	6'87 8'33 6'52 13'10	8°19 2°43 9	64°62 59°62 84°40 62°54	49:69 55:36
	Dinagepore	Mohadebpore Churamon Raigunge Dinagepore Raioorghat		0:15	2.00 0.65  0.43 1.41	4°50 1°95 5°60 1°70 2°20 12'30	1°20 6°68 7°52 10°70 6°04 3°22	0°50 0°36 0°65 1°55 1°11 0°27	0°14 0°38 0°26	5 5 3 4 5	8'35 9'78 13'77 14'33 10'04 17'20	8:51 9:78 13:77 14:73 10:39 17:81	2.72 2.29 8.64 3.45 8.21 P	67:94 80:28 92:75 86:75 81:01 107:04	55.54 51.87 57.38 61.71 51.72
	Rungpore	Thakoorgaon Bunwanigunat (Gyabanda) Rungpore Kurigrau. Bagdogra		 	0.25	2°05 3°50 3°43	13:30 14:06 10:10	2.90 0.68 0.85	0°50 0°41	3 4 5	18°25 18°74 14°67	20°40 10°91 17°57	4.00 3.91 3.78 4.20	123°20 96°52 96°59 96°59	60.80 72.96 71.80 88.38
	Julpigoree	(Nilphamari). Ulipore Julpigorne Alipore Dooar Fallacottu Debigoni		**************************************		2:32 2:82 2:45 2:61 4:22 2:06	9.75 12.26 6.26 5.81 5.20 6.45	1·27 8·61 - 2·93 2·17 2·05	0°72 0°15 0°14	3 4 3 4 4	16'35 18'04 11'34 11'74 11'30	17:78 18:29 14:27 16:59 18:22	9 3:58 9 9	97°52 156°26 187°47 146°30 115°70	114.28
	Cooch Behar,	Bhagatpore (Nagrakatta) Dinhatta Gooch Behar Mickilgunge Matabhanga		0.00	0.08	2·13 3·00 4·30 1·92 3·04 1·87	4'50 12'11 5'81 5'64 6'57 6'00	2.79 1.05 1.30 3.00 1.94 2.31	1.00 0.06 0.31 0.38 0.20	4 4 5 4	10°41 16°22 11°49 10°96 11°93 10°38	15°24 16°98 12°49 13°01 14°04 19°65	\$ 4°31 4°38 3°20 5°57 7°03	182'30 128'95 169'87 146'35 171'51 109'61	98'59 116'87 104'04 111'14 187'51
	Darjeeling Hili.	Sulliguri Darjeetins Kalimpong Kurseong	0.15	0.13	0.05	1°24 0°76 1°14 1°48	5°48 6°87 6°20 5°60	1.83 1.59 1.44 2.70	1°23 1°45 2°11 2°55	5 4 7 4	10:00 10:17 11:19 12:33	13°36 10°50 11°76 12°61	5°83 - 3'69 2'34 ?	178:81 150:29 122:32 192:38	101 38 103 83 26 65
	Purnesh	Kissengunge Arrareah Purneah Gondwara Balarampove		0.10	1.04 1.20 1.37	2.69 1.70 1.50 2.30 4.20 2.5	9:75 8:92 4:28 0:38 5:30 0:10	1.16 0.40 0.37 0.27 1.05	0.08	4 3 4 6 4	13:06 6:02 6:22 5:04 12:05	18'82 6'43 6'68 12'75	2.43 2.76 2.66 9 9	105:38 83:78 80:56 10:45	68'70 68'33 60'61 P
	North Bhagal- por	Maciari Kaliagani Maddapero Soppool Protabgani				1.50 1.04 0.46 1.50	4.00 1.30 0.89 0.26	0.09	0.24	4 3 2 2	6'58 2'41 1'35 1'81	7'40 8'23 1'50 2'56	3.13 3.20 5	118-65 61-61 63-21 49-30	48 16 46 7u
	Durbhunga	Tajpore Durbnuaga Madhubani Bahera				0°62 1°85 0°01 1°62	0.07 0.54 0.48	0 04 0°13 0°23 0°22	0'13 0'26	3 4 4 2	0°73 2°35 2°09 1°84	0.73 2.35 3.09 1.84	2.23 2.36 1.94 7	51.70 58.54 62.61 53:58	41 69 49 42 43 53
	Mesufferpore	Rostera Sitamerhi Mosufferpore Haipore Part Mahuo Sinhar Pupri			0.23	0°53 0°67 0°33	1°03 0°50 0°18 4°00 0°00 2°10 1°37	0°87 0°27 0°46 2°00 2°30	0°11 0°12 0°10 0°17	4 4 8 2 2 2 3 3	2°54 1°56 0°96 6°00 0°42 4°50 1°84	2'61 1'56 0'96 6'00 0'42 4'50	2°27 2°29 3 43 9 9	52'95 56'13 45'37 70'81 44'45 53'18 50'19	48°32 48°49 49°59 ?

Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 17th of October 1890-concident

			no love	EST.	R	AINPAL				Тот	AL				
M-teorological Division,	District.	Station.	Saturday, 11th October.	Sunday, 12th October.	Monday, 13th October.	Tuesday, 14th October.	Wednesday, 15th October.	Thursday, 16th October.	Friday, 17th October.	Number of rainy days.	Rainfall of week,	Total rain- fall since lst of month.	Average total rain- fall from 1st of month,	Total rain- fall since 15th May 1890.	Av ra from
NORTH BEHAR -concluded.	Chumparan	Motihari Bettinh Bagaha				0.15	4·13 1·27 8·00	1'81 3'16 0'04 0'72	0°24 0°17 0°23 0°11	\$ 3 4 3	6°13 4°60 3°39 2°03	6°18 4°84 2°10	8·13 3·40 9	71·78 64·84 58·34	
Ja	Sarun	Gopalgunge Sewan				0.63 0.64	0.04	0.10		3 2 2	1'67 0'81 1'95	1.67 0.81 1.95	4.76 3.07 2.81	52.67 59.84	110
SOUTH BRHAR	Shahabad	Chuprah Buxsr Dehree Bhabooah Sasseram Arrah	******	*****	******	1'85 0'34 0'09 0'31 0'35 0'04	0°10 1°24 0°26 0°59 2°11	0.13		2 2 1 2 3	1°58 0°35 0°31 0°94 2°28	1 58 1 58 0 38 0 31 0 94 3 17	2·38 2·19 2·33 2·64 2·59	48°27 52°25 43°14 41°11 44°19 66°84	
	Gya	Aurungabad Gya Nowadah Jehanabad		0.07		0°16 0°43 0°22	0.44 0.12	0.03		2 8 1 3	6'51 0'32 0'43 "0'38	0°51 0°34 0°43 0°38	2°43 1°67 2°02 3°03	59°49 60°04 54°84 53°31	
		Arwal Daudnagar Sherrghati Rajauli Pakri Barawan	1.00	-		0°34 0°60	0°72 0°20 0°22	0.12		1 2 4	0°72 0°54 1°97	1.67 0.80 2.97		36'81 45'60 54'24	
f 4p.	Patpa	Patna Diospore Rehac Burth Bickram Hilso			013	0°25 0°47 1°00 0°23 0°13	0°40 1°35 0°17 0°10 0°56 0°33	0°58 0°10 0°47 0°05 0°04 0°48	0.04	3 3 3 4 3 4	1.02 1.70 1.11 1.25 0.83 1.07	1'02 1'97 1'11 1'25 0'83 1'07	2°45 2°35 2°28 2°26 2°7	50°02 52°13 46°95 43°25 57°80 50°24	
	Monghyr	Begooserai Monchyr Jamui Gogri Sheikpura	0.45		0.55	1'50 0'96 1'49 1'80 1'45	0°27 0°98 0°19 2°54	0.04 0.09  0.22	0.03	4 5 3 2 2	2·26 2·28 2·02 4·34 1·97	2:26 2:86 2:14 4:84 1:97	2·12 2·43 1·91	44*29 54*84 60*22 76*44 47*76	
	South Bhagul- pore	Banka Krlg no Bongaon		****	0°40 1°03 0°43	1°28 2°75 1°81	3.03 0.24 2.23	0°64 0°03 0°25	0°06 6°02 6°50	5 5 5	5°41 3°37 5°52	5 41 3 63 5 77	2:46 2:32 ? ?	59'77 42'11 62'06	
	Sonthal Pergunnahs,	Rajmehal Godda Pageur Nya Doomka Deoghur Jamtara Mohasama Nanihat	0°03 0°98 0°2 0°12	0°15 6°06 2°25 1°24 0°36	0°53 1°40 1°88 0°55 0°33 0°16 1°12 1°65	2.92 2.25 4.44 6.25 1.05 12.04 1.15 1.60	4'48 0'68 3'56 2'53 1'09 5'25 0'66	0.29 0.10 0.73 0.05 0.01	0°11 0°05 0°14	6 6 7 6 4 4	8'48 4'51 11'74 11'45 3'84 17'81 3'28	8°59 5°66 11°96 12°24 4°18 18°25 3°28	2:48 2:37 3:70 3:28 2:81 2:43	56°86 50°75 73°93 24°90 49°43 74°28 48°81	
CHUTTA NAG-	Hazaribagh	Pachamba . (Giridi), Hazaribagh Semtagurah Mahudi Hil s	1°71 0°05	0.10	0°17 0°43 0°30	0°79 0°25 0°20	0'14	0.11	0.03	6 5 3	2°95 0°86 0°60	3.08 1.33 0.70	2:38 2:53 2:69 2:31	55'35 49'95 38'89	
		Jhoomra Hilis Barhi Chatra Karagdeha kamghar	0°04 1°08	0.04	0.23 1.80	2°03 0°37 1°21 0°33	0°72 0°35 0°15	0.05		5 2 5 2	2'90 0'72 2'96 2'13	3'00 2'05 5'89 2'33	2.40	50°24 47°08 57°34 50°24	
	Lohardugga	Lohardugga Ranchi Palamow Silli Ralumat Hosseinabad	0.11	0.92	0.48	0.90 0.46	0°08 0°09 0°70			1 5 1 4 Nil	0°66 1°70 0°09 3°20 Nil	1.76 2.54 0.59 5.40	1'56 2'14 2'05	53°19 48°57 44°27 48°50 41°75	
	Singbhoom	Chyebassa Chakradhar- pore.		0.12	- 0:40 0:25	0°40 1°30	0.09		===	3 3	0°89 1°70	1'78 1'70	1'77	33'94 24'85	
	Manbhoom	Ghatrilla Baharagura Purulia Gobindpore	0.03	0.66	1°85 9°75 1°20 0°08	0°35 0°45 0°60 2°67	0.13	0°34 0°41		6 5	2°96 3°49	3°08 3°57	5.98 5.98 5.98	44°99 38°61	
		Raghunath- pore. Barrabhoom Jhaldo Chus	1:36	0°12 0°12 1°09	2:72 0:80 0:61 0:20	0°62 0°40 1°07 3°50	0.38		******	2 4 4 2	3°34 1°70 3°16 5°12	3'34 19'0 8'51 5'32	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	61°86 44°15 64°71 50°18	

Explanation. -.....indicate that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of them are wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 21st October 1890.

# SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVALIONS TAKEN IN ASSAM, FOR THE WEEK ENDING FRIDAY, THE 17TH OCTOBER 1890.

Meteorologically speaking, the past week has been the most important of a very uneventful season, in that it furnished the severest cyclonic storm of the year up to date. It may be remem ered that at the end of the previous week a low-pressure area had formed, with its centre between the Andamans and Madras. On the 11th it had intensified considerably and approached the coast, wind increased to a gale at Pooree and Gopalpore, and fierce squalls developed in the south and south-west quadrants of the whirl. On the 12th the centre of the depression continued its north-westerly march and crossed the coast during that night, winds meanwhile abating somewhat. On the 13th and 14th the depression moved northwards, its centre keeping steadily parallel to the coast; winds of course increasing at all points in its progress and quieting down in those localities from which it was receding. The far-reaching effects of the depression are exemplified, however, not so much by any very unusual wind velocity as by the general and very heavy rain which followed in its wake. So far as reports have been received, not one single station in the province including Assam, Behar, and Orissa, fails to report rainfall, and in the great majority of cases the weekly fall exceeds the average for the whole month.

Pressure has been almost everywhere below the normal of the week, but owing to the

Pressure has been almost everywhere below the normal of the week, but owing to the movements of the depression it has of course varied greatly from day to day. The ultimate result is that it considerably above the average, with a disquieting element in the shape of a relatively low-pressure area in the south of the Bay. As might be expected, in Orissa and South-West Bengal have suffered the greatest defect (—'080" to —'050"), whilst Behar and

East Bengal are closest to the normal.

Temperature.—Consequent mainly on the depression, temperature was below the average by amounts varying from 0.9° in East Bengal to 3.8° in North Bengal. These refer to divisional averages, but local temperatures do not differ from them much. The tendency throughout the week at all places was distinctly towards a decline.

Winds were cyclonic at the beginning of the week. As the depression passed away they naturally became more feeble and variable in direction. At the close, however, they were

again feebly cyclonic.

Rainfall.—As mentioned above, the rainfall has formed the most abnormal element of the weather for this season of the year. North Bengal records the highest divisional average, 11·26 (just eight times the weekly normal). Next come Orissa and South-West Bengal with 6 95" and 6·3 \*" respectively, each about four times the normal quantity for the week. North and South Behar each received 3·41" (about five times the normal), East Bengal 3·25" (nearly double the normal), and Chutia Nagpur 1·58", which is more than double its average fall Some very heavy subdivisional falls are reported as under:—

	Distric	t.		Station	S.		Date		Rainfall in inc	hes
24-Pergunnal	18			Diamond Harbour		14th	Oct.	1890	5:28	
Ditto	100			Canning Town		1441			2 67	
Ditto		ST TENER	***	Baraset		1441		"	2.25	
Howrah				Oolcoberiah	7 - 1	7.441			3.15	
Beerbhoom		4.0		Soory		14+1			3.06	
Ditto	M. 1		2000	Balpore		1 1+1		.,	2.76	
Backergunge			***	Patuakhally		1246		**	4.50	
Ditto		-		Bhola		12+1		**	2.33	
Sonthal Perg	annahs		***	Pakour	Control of the Contro	1.441			4:44	
Ditto				Jamtara		14+1			12:04	63
Manbhoom				Gobindpore		14+1			2.67	
Ditto		At the fall		Raghunathpore		12th			2.72	48
Cuttack				Kendrapara		10+1		**	3.77	
Ditto				Jajpur		1 941		**	3 30	
Balasore		30.00	500.0	Bauddruck		1941			5:00	1
Ditto				Chandbali		7 9+1			4.80	
Midnapore				Contai		7.4+1		.,	9:40	100
Ditto		E. E. E. E.		Tumlook		3.446	100	APPL AND	4:00	
Ditto	The State of	***	25720.1	Kukrahati		1.441			5:76	
24-Pergunnal	18	1		Canning Town		15.h			4.02	
Bankoora				Bankoora	2000 m. 114	7.4+1.		2.	3.34	200
Beerbhoom		4		Rampur Haut		14.1		1000	4:50	
Nuddea	A DEVALUE		7	Meherpur		15th			6 33	
Backergunge				Bauphal		1941		.,	3.50	
Dinagepur				Raigunge		1.44%			5.60	
Sonthal Perg	unnahs			Pakour		1541		-	3.56	
Ditto	7	444		Jamtara		1541			5.25	
Manbhoom			1061.2	Chas	A CONTRACT OF	1.4+1.		AND C	3:50	
Cuttack				Salipore		1946			3.26	
Balasore		16.2		Jellasore		7 44%	SALD S	<b>第52</b> 分	3.54	
24-Pergunnal	18		W-1955	Canning Town		TOLL			4.58	
Ditto				Barrackpore		101			3.05	
Ditto				Buseerhat		15+1	4 10 10 10 10 10 10	**	3.10	

Vaniantima.				Khatra Chooadanga Meherpore Panchbibi Sherepore Naogaon Kurigram Nilphamari Debigunj		- *	14th 16th 16th 15th 14th 14th	Oct.	1890	3·30 3·80 4·20 7·28 3·41 3·67
Nuddea Do. Bogra Do. Rajshahye Rungpore Ditto ulpigoree Cooch Behar Ditto				Chooadanga Meherpore Panchbibi Sherepore Naogaon Kurigram Nilphamari	  		16th 16th 15th 14th 14th	" " " " "	" " " " "	3·80 4·20 7·28 3·41 3·67
Do. Bogra Do. Rajshahye Rungpore Ditto ulpigoree Cooch Behar Ditto		***		Meherpore Panchbibi Sherepore Naogaon Kurigram Nilphamari	 	  	16th 15th 14th 14th	"	" " "	4·20 7·28 3·41 3·67
Bogra Do. Rajshahye Rungpore Ditto Sulpigoree Cooch Behar Ditto				Panchbibi Sherepore Naogaon Kurigram Nilphamari	/::	:::	15th 14th 14th	"	» »	7*28 3*41 3*67
Do. Rajshahye Rungpore Ditto Ulpigoree Cooch Behar Ditto		**************************************		Sherepore Naogaon Kurigram Nilphamari	-	:::	14th 14th	99- 91	"	3·41 3·67
Rajshahye Rungpore Ditto ulpigoree Cooch Behar Ditto		4. *** 6. *** 6. ***		Naogaon Kurigram Nilphamari			14th	**	**	3.67
Rungpore Ditto ulpigoree Cooch Behar Ditto		8	::	Kurigram Nilphamari	***			111		
Ditto Julpigoree Cooch Behar Ditto				Nilphamari		***	TABLET			3.43
ulpigoree Cooch Behar Ditto	 	***			***		15th	100	**	9:75
Cooch Behar Ditto			***				15th	25	"	6.45
Ditto	•••	***			***		14th	33	"	3.04
			***	Matabhanga Dinhatta	***	***	14th	**	"	3.00
Jarjeeling	***	10.444	***		***	***	15th	**		5.43
73.44			***	Siliguri	Here (10)	***	15th	"	"	6 20
Ditto	***	***	***	Kalimpong	***	1100	15th	**	11	5.60
Ditto	***	***	***	Kurseong Bagaha			15th	**	**	3.00
humpraun	***			Rajmehal	***	***	15th	**	"	4.48
onthal Pergu	ишань		•••	Ta jiledia					90	D. S. S. S.
and the second	Gopa	lpore			11th	October			2.	79
	Di			100	12th	,,		/	3	05
				11 10 100 100 100	13th				4	
	Poore		***		Tota	"			4.	
PER SECUL		Point		***	**	19		***	1077	
	Balas	ore			12th	,,			2:	
	Noak	holly		1.5	13th	"			5.	10
		or Island			14th				4.8	80
					15th	"			4.	
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** 10 mm - 12	Julpi	goree		***	16th	11			3.	
		gunge			,,	11			7 5	28

Humidity and cloud proportion were very high throughout the week.

Weather has been dull and gloomy, and much rain has fallen. Northerly winds have set in West Bengal and along the Madras coast, and barometer has recovered everywhere. These are conditions favourable to an early cold season, but unfortunately they also favour the formation of another cyclonic storm, and the latter appears the more likely favourite.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 17th of October 1890 :-

		150	TEMPE	RATUI	RE.	2-17	4.0			R	AINVA	LL.	SALLOW SALLOW			
	g week.	week.	Averag	es for	week.	above or week.	c	of week	k.	Re	iny da	ys.	Since of me		Since May	
METEOROLOGICAL DIVISIONS.	Highest observed during	Lowest observed during week,	Of highest of each day.	Of lowest of each day.	Of mean for each day.	Average mean of week the below normal mean of v	Average.	Normal average.	Variation,	Average number in week.	Normal average num- ber in week.	Variation.	Average.	Normal average.	Average.	Normal acerske.
Orissa	91'4	71.6	84'6	75'4	80.0	-1'9	6:95	1.71	+5'24	414	1.9	+2.5	7.27	3.82	59'84	48.61
South-West Bengal	92'3	70 0	83.9	74'6	79.2	-2'5	6.39	1.66	+4'73	5'4	1:4	+4'0	7.15	3.11	55.74	43.74
East Bengal	92.1	71.7	85'2	75'2	80'#	-0.9	3.87	1'84	+1.23	2'4	1.7	+0.7	4'17	3.97	68'84	71.11
North Bengal	90'6	62.1	81'4	72.2	76'8	-3.8	11.36	1'41	+9.85	4'8	1'8	435	12.16	3:51	95.05	67:56
North Behar	90.4	65.8	82.3	71'8	77'1	-2.7	3.41	0.68	+2.75	3.1	0.8	+2.3	3.22	2.86	64'41	47:29
South Behar	30.8	66.8	83'1	72.1	77.6	-2.6	3'41	0.68	+2.73	3.6	0.0	+2.7	3.63	2'46	54'44	42'15
Chutia Nagpur	84'9"	61:3*	79'1"	66.3*	72'7"	-2.8	1'58	0.76	+0.83	3.9	1'3	+2.6	1.97	2'26	45:59	47:41

· Chyebassa not included.

METROROLOGICAL OFFICE, BENGAL;

J. H. GILLILAND,

The 21st October 1890. For Offg. Meteorological Reporter to the Govt. of Bengal.

### Results of the Meteorological Observations taken at the Alipore Observatory from 12th to 18th October 1890.

			g of	meter		Темре	RATURE			Hygnon	CETRY.		WIND			
Month,	Date.	Maximum in sun.	Number of hours bright sunshine.	Mean pressure barometer at 32° Fahr.	Mean,	Maximum,	Range.	Minimum.	Mean wet bulb,	Vapour pressure.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.	Rain.	WEATHER,
	acting 1	0		Inches.	0	0	0	0	0	Inches	0	%			Inches.	
Oct.	12th	123.6	0.2	29.801	79.5	81.4	4.9	76.5	76-6	0.879	75.3	87	ESE, ENE and E	117	0.07	Chiefly cloudy, o
:00	13th	93.4	Nil	.768	77-2	77.5	3-2	74.3	75.6	*864	74.8	92	ESE and SE	113	1.16	Cloudy, o, g, d t, <,
21	14th	85-5	,,	-693	76 5	78-0	5.5	72.5	75.2	-857	74.6	94	ESE, SE and SSE	169	2.91	Cloudy, o, g, c
11	15th	96-5	,,	766	76.8	78 6	4.1	74.5	75 5	-867	74-9	94	SSE and calm	27	0.83	Cloudy, o, g, d
"	16th	130.4	0.5	875	76-7	81.5	9.0	72.5	75-3	-859	74.6	93	Variable and calm	22	1.25	Cloudy o, g, d
:11	17th	140-5	8:7	-912	78.5	84 5	12.6	71.9	75 6	-849	74.3	88	W by N and calm	26	Nil	Partially cloudy
11	18th	142 5	9.2	*852	79 1	85.8	12.4	73.4	75-3	-827	78.5	88	Variable and calm	25	"	Partially cloudy

The mean pressure of the seven days The average pressure of the corresponding period for	 24 years	SG.'s	Office	Inches, 29.810 29.846
				Hours.
The total number of hours of bright sunshine				18.6
The maximum possible number of hours of sunshine				81.2
The mean temperature of the seven days				77.8
The average temperature of the corresponding period	for 24 ye	ars, 8	d.'s Office	82.3
The extreme variation of temperature		***	***	13.9
The maximum temperature				85.8
			A STATE OF THE REAL PROPERTY.	Miles.
The highest velocity of the wind in one hour				11
				lbs.
The highest pressure of wind on one square foot		1	pproximately	4
The mean relative humidity				90
The average relative humidity of the corresponding i	harind for	24 veer	8-G'e	30
Office	period ror	ar your		79
<b>***</b>		***	STATE SAME	Inches.
m / 1 6 11 6 1 6 1 101 / 101 0 / 1 100	0			
The total fall of rain from 12th to 18th October 1896				5.72
The average fall of the corresponding period for 24 years		's Office		0.79
The total fall from 1st January to 18th October 1890		***	•••	59.97
The average fall of the corresponding period for 24 y	ears, SG	.'s Office		62.28

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in

the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph

The mouth of the rain-gauge is one foot above the ground.

o, overeast; g, gloomy; d, drizzling rain; t, thunder; <, lightning; •, continued rain; p, passing temporary shows; a, dew.

V.B.—In the weekly report from 28th September to 4th October 1890 read "149.5" for "14.59" as the maximum in sun of the 29th September, so read "29.786" inches for "29.76" inches as the mean pressure of the 3rd October 1890.

J. H. GILLILAND.

For Meteorological Reporter to the Goet. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA; Calcutta, the 20th October 1890.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 12th to 18th October 1890.

" 1 " 1 " 1		reduced			TEMP	ERATURE.			H	YGROMETR	r	ours.	
	Date.	Pressure at 10 corrected and red to 32° Fahr.	Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10	Wet bulb at 10	Vapour pressure at 10 A.M.	Dew point at 10 A.M.	Humidity at 10	Rainfall past 24 hours	
W -			Inches.			•	0	0	0	Inches.	0	%	Inches
) ) ) ()	**	12th 13th 14th 15th 16th 17th 18th	 29·883 ·831 ·736 ·806 ·916 30·000 29·904	79·3 76·9 76·6 76·9 78·9 79·1 80·7	80·9 77·9 79·4 80·4 80·9 85·9 87·0	3·3 2·9 5·6 7·1 5·8 13·6 12·7	77.6 75.0 78.8 73.3 75.1 72.8 74.8	79.6 77.6 74.6 78.6 80.1 79.9 83.1	76.5 75.5 74.0 78.0 78.0 76.5 76.5	*878 *857 838 *953 932 *868 *825	75·1 74·5 78·7 77·7 77·1 74·9 78·4	87 91 98 97 90 85 73	1-00 2-66 0-87 0-56 1-81

		and the second	1	Inches.	
The mean 10 a.m. pressure of the seven days		18B.		29.868	
The mean temperature of the seven days				78.2	
The extreme variation of temperature				14.7	
The maximum temperature				87.0	ď
				89	
The mean 10 A.M. relative humidity of the sev			***	89	
The total fall of rain from 12th to 18th Octob	er 1890		***	6.89	

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA; The 20th October 1890.

### MEMORANDUM.

Monthly review of deaths registered in forty-five districts of Bengal for the month of August 1890.

The deaths registered in forty-five districts in Bengal during the month of August 1890 were 116,479, and correspond to an annual rate of 21·12 per 1,000 of the aggregate population of those districts, which is 65,859,534. This rate is 1·44 lower than the mean rate of the corresponding months of the past five years 1885—89, and is also lower than the rate of the corresponding period of any of the past five years except 1886 and 1888, vide the figures below—

	1885.	1886.	1887.	1886,	1889.	Monthly average of five years, 1885—89.	1890.
Ratio of deaths per 1,000 of the population per	24.60	20.64	24'96	19.68	23.04	22:56	21.12

The following table shows the highest proportions of deaths registered during the month of August 1890, compared with the corresponding month of 1889:—

Districts,	1	1	latio per	milla	during—	Districts.		, I	tatio per mi	lle during-
The same		Δι	ngust 189	0. 1	August 1889	LUMBER OF THE		A	ug st 1890.	August 1889
Darjiling			37.20		42.00	Shahabad			29.88	38.16
Gva	***		36.84		42.00	Khulna	***	***	27.12 .	17.40
Chumparun			34.08		15.84	Mozufferpore	***	***	25.92 .	18:96
Patna Norkhati		***	33.13	•••	23.04	Julpaiguri Hazaribagh		***	25.20	23.64

The total mortality during the month under review from the several registered deathcauses is compared in the following table with the mortality from those causes in the corresponding month of 1889 and the average of the five years 1885—89:—

		La Distriction	Silver.		Ratio per mille duri	ing	
				August 1890.	August 1889,	Monthly average five years 1885-	
Cholera	***	***		1.32	2.64	2.64	
Small-pox	***	***	****	.08	*06	.04	
Fever	484	***		15.24	15.12	15.12	
Bowel-complaints	***		***	*48	.96	*84	
Injury	***	***	***	.72	*84	-72	
Other causes	***		***	3.00	3.36	3.00	

It will be seen from the above that there was a noticeable decrease in cholera deaths during August 1890. The mortality under the other heads was pretty much the same as in corresponding past periods.

ponding past periods.

The highest annual death-rates from cholera and fever occurred in the following districts:—

		Cholera.	Zerani.				Fever.		
				Ratio per				1	Ratio per mille.
Chumparun				11.64	Noakhali				28.08
Gya		***	***	6.48	Gya		***	***	24.84
Shahabad	•••	711	***	6.00	Julpaiguri	***	****	***	23.64
Moznfferpore	***	38 Jan - 38	***	5.64	Darjiling	***	***	***	23.52
Patna	***		***	4.68	Khulna	***	***	***	23.28
Sarun		•••	***	3.00	Dinajpur	***		***	21.36
Durbhanga	***		***	2.28	Jessore	***	•••	***	21.12
1000				Service W	Hazaribagh	•••	***		20.88
2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CONTRIBETOR IN	10 TO SEC. 10 TO SEC. 10 TO SEC. 10			Rajshahye	***	***	***	20.40

The mortality of the month under review, according to Sex, Class and Age, was distributed as follows: -

According to Sex.	Ratio per	According		ss. Latio per mille.	According to A	ge.	Ratio per
Males Females Ratio of male deaths to every 100 female deaths calculated on the proportion such mortality bears to the total male and female population		Christians Hindus Mahomedans Buddhists Other classes	=	12:36 21:96 19:92 13:56 16:68	Under 1 year 1 and under 5 years 5 ,, 10 ,, 10 ,, 15 ,, 15 ,, 20 ,, 20 ,, 30 ,, 30 ,, 40 ,, 40 ,, 50 ,, 50 ,, 60 ,, 60 years and upwards		151·20 25·68 12·72 10·80 12·96 12·84 14·04 19·44 27·96 48·60

Detailed information regarding the mortuary statistics of the forty-five districts of Bengal during the month under review will be found in the statement appended.

W. H. Gregg, Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

The 15th October 1890.

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-			DIVISIONS		BURDWAX		PARSILISMENT A						
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		10		M Najer	668,296 507,136 381,543 1,248,196 311,665 114,866	490,031	\$18, 470 890, 571 896, 571 896, 571 1,007, 710 1,007, 710 1,007, 700 1,003, 863 1,003, 8						
10		POPULATION		Females.	725,528 534,616 412,855 1,272,570 847,885 177,559	524,974	818,000 841,000 644,007 644,007 645,100 1,000 841,100 842,144 843,144 844,600						
		4		Total,	1,891,823 1,041,752 794,428 2,515,565 663,060 361,955	1,015,005	655 383 1,673,382 1,573,382 1,514,346 1,						
	100			Cholera,	2592-5	=	11						
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	100						1115	1115	1115	FRMS.	HEMS.	DEAT	Fereis.
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						1	Other diseases.	******	20	12			
								woenno NF	399 1 319 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2		
0.07					1,993 1,100 1,346 1,290 1,095 664	1,759	1						
	25		RATIO	Cholera,	252424	1 22	112 122 123 124 125 125 125 125 125 125 125 125 125 125						
	MORT		PER 1,000	Small-pox.	97 :958	90.	2						
	MORTALITY		80	Bowel-complaints.	12.12 11.16 14.28 14.28 14.28	14.40	# 4 2 2 1 0 0 8 8 2 8 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5						
9	ACCORDING		POPULATION	bower companies		81.8	28 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						
				10.7		184	Other diseases.	86. 84. 84. 84. 84. 84. 84. 84. 84. 84. 84	100	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2			
	T0-			ANNUM.	All causes.	3.38 16. 6.48 20. 6.48 20. 7.50 20. 7.50 20. 7.50 20.	3.00 80.76	660 90 90 90 90 90 90 90 90 90 90 90 90 90					
			COMP	sdrash to olfast and of 000,1 and munna yeq noisal	-56 117 -08 119 -28 22 -20 24 -30 18 -56 18		2.00						
9							COMPARISON WITH PREVIOUS PERIODS.	month; the previous month; Ratio of deaths per 1,000 of population per annum intion per summing in the correspond-	55.00 50.00		The second secon		
			Old House	ing month of the previous year.	21.60 31.93 21.13 22.13 25.16	23.88	28						
,			<b>Б</b> итня <b>В</b> иоме-		7759 7756 7796 1, 294 1,	1 1	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1						
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a			TTHEN OF W	Ratio of male death, 2017 of the proportion of the troportion telling bears to the	14-28 115 18-00 126 18-72 118 18-72 118 21-36 111	113	100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						

R BENGAL,	
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	DEATHS AMONG	Mahomedana	33.1 488 905 252 196 104	25.0 2.1.1.45 2.2.2.1.1.45 2.2.2.1.1.45 2.2.2.1.1.1.45 2.2.2.1.1.1.2.1.1.1.1.1.1.1.1.1.1.1.1.1	35,437	
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	103	Огрек сравнец.	12 18 1 1	11::::::::::::::::::::::::::::::::::::	16.68	
	e A	Under 1 year,	25 4 5 5 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28.5 28.5 28.5 28.5 28.5 28.5 28.5 28.5	19,512	
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1	DEATHS.	years.	25 12 25 05 18 18 18 18 18 18	200 1188 1188 1198 1198 1198 1198 1198 11		
		20 and under 50 years.	127 127 128 128 128 128 129 129	88 143 143 143 143 143 143 143 143		
	1 190	years	23:6 1133 1115 1115 1123 1133 1137	28 28 28 28 28 28 28 28 28 28 28 28 28 2		
	f 2	years.	1130	83 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The state of the s	
A	7 7/2 9	years.	2 1185 1185 128 128 138 138 138 138 138 138 138 138 138 13	1100 00 00 00 00 00 00 00 00 00 00 00 00	13	
Ago.	A P	Under 1 year.	252 158°52 181 140°04 137 31776 577 146 61 153 113°16 95 108°96 248 111°60	138 188 78 58 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	142 192'54	
	KAT	d rend under 5 years.	776 21'5'86 6' 24'36' 6' 24'36' 116 38'84 96 32'61	######################################	2 8	
	KATIO PBB 1,000 OF	5 and under 10	7.56 8.8 8.94 8.00 11.28 94 12.24 11 16.38		68 13.72	
		10 and under 15	21 10 8 9 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		10	
100	Bi O	15 and under 20	816 913 913 913 984 984 1818 1818	55. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	114	
	POPULATION	08 read under 80	9.96 8.32 8.32 9.73 11.76 12.36		13.84	
4 4		30 and under 40 years.	11.16 11.16 11.16 11.16 11.16 11.16 11.16 11.16 11.16 11.16 11.16	10.01 10	9.1	
	PER ANNUM.	od tohnu under 50 years.	14.04 21.24 21.04	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	19.61	
100		00 rabun bas 00	19-90 82-28 82-88 82-88 82-88 1-88 1-88 1-98 1-98 1-98 1-98 1-98 1	25.75 25.75	01.0	

Sanitary Commissioner for Bengal. W. H. Gregg, Dip. Publ. Health, Camb.,

The 15th October 1890.

#### MEMORANDUM.

Weekly review of births and deaths in twenty-seven of the principal towns of Bengal for the week ending with Saturday, the 4th October 1890.

#### BIRTHS.

The births registered during the week ending with Saturday, the 4th October 1890, in twenty-seven principal towns of Bengal correspond to an annual rate of 29.7 per 1,000 of the aggregate population of those towns, which is 1,061,574. This rate is 7.9 higher than the average rate of the corresponding week of the past five years, and is also higher than the rate of the corresponding week of any of the past five years with which comparison is instituted—vide the figures below:—

A Landau	1885.	1886.	1887.	1888.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of births per 1,000 of the population per aunum	27'9	21.1	15.4	25'0	19'8	21.8	29-7

The births registered in each of the last four weeks in each of the twenty-seven principal towns correspond to the following rates per 1,000 of the population:—

				V	EEKS EN	DING-				WEEKS E	NDING-	
3,4	Town	8.		13th Sept. 1890.	20th Sept. 1890.	27th Sept. 1890.	4th Oct. 1896,	Towns,	13th Sept. 1890.	20th Sept. 1890.	27th Sept. 1890.	4th Oct. 1890.
Burdwan Midnapore Hughii and C Serampore Utterpara Howrah Bali Krishnagar Rannghat Santipore Jessore Rampore Be Darjiling	hinsur	ah		83'6 9'3 59'4 31'4 37'7 21'8 17'5 26'3 12'2 39'4 37'0 14'9	21'4 13'9 39'4 45'1 37'7 21'8 10'5 - 17'0 12'0 14'0 	16:8 9:3 18:1 41:2 28:3 22:9 17:5 17:0 24:0 5:2 12:2 57:8 44:5 21:4	53'4 17'0 34'5 47'1 8'4 25'2 28'1 26'3 12'0 26'3 	Nerainganj Chittacong Comillah Pat na City Gys Arrah Mozufferpore Durbhanga Chupra Bhagulpore Monshyr Purneah Poori  Total	14'7	37°3 4°7 19°3 14°6 42°4 57°4 25°5 87°0 38°2 19°9 46°1 10°4 12°6	41'4 11'7 27'0 11'4 26'0 19'1 24'3 38'5 13'1 29'0 39'8 10'4 12'6	37°3 9°4 15°4 19°8 36°9 47°0 24°3 40°8 38°2 26°1 10°4 14°7

It will be seen that last week the highest birth-rate was returned from Rampore Beauleah (63.1) and the lowest from Utterpara (9.4). No births were registered during the week in Jessore town.

#### DEATHS.

The deaths registered during the week under review correspond to an annual rate of 23 per 1,000 of the population. The rate of the week is 5.7 below the average rate of the corresponding week of the past five years, and also below the rate of the corresponding week of any of the past five years except 1887—vide the figures below:—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of deaths per 1,000 of the population per aunum	89'2	83'4	18:3	25'4	24.1	28.7	23.0

The deaths registered in each of the last four weeks in each of the twenty-seven towns correspond to the following rates per 1,000 of the population:—

	nd Chinsurah		VEEKS 1	INDING-			V	VEEKS E	NDING-	SOUTH TOTAL
Towns.		13th Sept. 1890.	20th Sept. 1896.	27th Sept. 1890.	4th Oct. 1890.	Towns.	13th Sept. 1890.	20th Sept. 1890.	27th Sept. 1890.	4th Oct, 1890.
Midnapore Hughli and Chinsurah Serampore	::	29'0 20'1 37'7 53'0 28'3 13'7 10'5 22'7 10'5 22'7 10'5 42'8 14'8 14'8 28'5	19'8 17'0 24'6 29'4 28'3 13'2 58'6 11'4 29'9 14'0 18'4 31'5 14'8 21'4	24'4 18'6 21'3 49'1 18'9 35'1 18'9 6'0  6'1 36'8 37'0 22'1	30°5 15°5 24°6 29°4 28°3 18°9 6°0 18°3 18°4 36°8 22°2 17°5	Narainganj Chittagong Comillah Patna City Gya Arrah Mozufferpore Durbhanga Chupra Bhagulpore Bhagulpore Monghyr Parneah Poori	16'6 9'4 27'0 20'4 40'3 15'6 24'5 22'8 59'2 18'1 21'7 13'9 31'5	16.6 14.1 10.3 14.9 38.9 35.9 26.8 36.2 28.2 17.2 28.3 17.5 21.0	41 16:4 16:4 19:8 89:6 83:5 15:6 83:0 11:1 20:8 28:9 6:9 14:7	16°6 9°6 7°7 14°5 47°1 13°5 25°2 35°4 34°2 14°2 30°7 10°4 25°2

It will be seen that last week the highest mortality occurred in the town of Gya (47.1) and the lowest in Ranaghat (6).

Measured by last week's mortality, the highest annual death-rates from cholera and fever occurred in the following towns:—

		Cholera.		Fever.		
			Rati	o per		Ratio per mille.
Durbhanga			8	6   Gya		29.4
Chupra	***	***	8		***	28 9
Gya Patua City			6	6		18

The total mortality from the several registered death-causes in the twenty-seven principal towns amounted to 2.3 from cholera, against 1.6 per 1,000 in the preceding week; .5 from small-pox, against .04; 11.7 from fever, against 10.4; 2.6 from bowel-complaints, against 3.3; .3 from injury, against the same ratio; and 5.6 from other causes, against 6.7 in the preceding week.

The mortality of last week according to Sex, Class, and Age was as follows:—

According to Sex.		According t	o Class.		According to A	1ge.
	Ratio per mille.			Ratio per		Ratio per mille.
Males Females Ratio of male deaths to every 100 female deaths, calculated on the proportion such mortality bears to the total male and female population		Christians Hindus Mahomedans Other classes		7:5 24:1 20:5 76:8	Under 1 year  1 and under 5 years  5	165 9 32 5 12 2 10 3 9 0 13 5 13 9 16 2 29 5 68 0

Detailed information regarding the vital statistics of the twenty-seven principal towns dealt with in the above review will be found in the statement appended.

W. H. GREGG, Dip. Publ. Health, Camb.,

The 17th October 1890.

Sanitary Commissioner for Bengal.

Statement showing the Results of the Registration of Births and Deaths in the principalities in Benyal during the week ending with Saturday, the 4th October 1890.

-	1 1000		DISTRICTS.		Burdwan 1	Midnapore 1	Hughli H	3	~	-	~	-	Nudden	1	Jessore J	Bajshahye I	Darjiling	Daces	7	Chittagong (	Tipperah	Patna 1	Gya (	Shahabad	Merufferpore. 1	Darbhanga	Barun (	1 2	Monghyr	Purnesh
			NAMES OF	i i i i i i i i i i i i i i i i i i i	Bardwah	Midnapore	Hughli and Chinsa-	Serampore	Utterpars	Howrsh	Bali	Krishnagar	Ranaghat	Santipore	Jessore	Rampore Beauleah	Darjiling	Daces	Narainganj	Chittagong	Comillah	Patna City	Gys	Arrah	Mozufferpore	Burbhangs	Chupra	Shagulpore	Monghyr	Purneah
	ava			Males.	18,063	16,927	15,858	13,559	8,046	53,153	7,836	13,263	4,028	18,708	4.830	10,766	4,579	42,783	7,605	13,340	8,153	78,762	38,990	20,966	\$3,084	88,774	25,116	89,640	28,154	8,463
	NOITATHAOA	O TOTAL		Fermales.	16,617	16,633	15,829	12,937	2,464	87,660	6,979	14,214	4,655	15,979	3,665	9,025	2,439	87,379	4,956	8,790	5,353	81,475	37,831	22,505	19,658	88,829	26,554	27,813	29,366	6,553
	NO			.IntoT	34,080	33,560	31,687	96,896	6,610	90,818	14,815	27,477	8,683	29,687	8,495	19,791	7,018	-	19,561	11111	18,506	160,237	76,121	43,465	49,742	960'99	51,670	57,453	67,520	15,016
			Non	Males.	18	9	22	7	1	88	10	63	-	00	1	00	-	7	55	10	63	30	. 53	52	9	34	64	51	4	01
			NUMBER OF	Pennales.	11	10	o,	13	ı	15	63	10	-	1-	1	16	01	13	10	01	1	33	31	15	14	18	17	00	10	1
	pa.		1	Total	100	11	18	76	1	44	60	14	01	15	:	70	00	50	9	*	*	19	24	40	80	25	38	58	64	00
	BIRTHS		RATIO PRE 1,000 OF POPULATION PER ANNUM.	Malos.	27.5	65	19.7	51.6	6.4	16.6	17.5	92	0.9	14.0	ı	31.0	Z	40	16.6	4.1	9.11	9.1	15.7	6.68	7.3	1.95	21.1	19.0	36.5	6.9
			PRE 1, PULATI ANNUM	Females.	622.6	1.1	14.8	22.2	_	9.8	10.2	7.22	0.9	13.3	1	0.55	14.8	* .	29.1	4.1	00	1.01	02	17.9	17.0	14.9	1.72		21.7	8.5
-			000 036	Total	53.4	0.41	34.5	1.45	9.4 No	50.0	1.85	9.98	0.81	8.98	1	63.1	90	13.0	37.3	7.5	15.4	8.61	6.98	47.9	84.93	40.9	38.0	8.98	6.29	10.4
				Ratio of male birth	105	120	133	84	o female	193	166	16	100	1114	1	69	99	22	08 .	100	300	96	7.4	160	27	188	123	2962	166	200
				Ополети.	1	:	ı	1	. ;	60	1	1	:	1	1	:	•	63	1	1		11	6	1	1	п	00	1	1	1
			-	small-pox.	1	1	1	1	í	:	ſ	1	:	:	i	1	1	90	1	,	1	1	1	01	1	1	63	1	1	1
			Вватия увом	Pevers.	92	ÇI	6	1-	1	o	10	1-	H	4	1	п	60	10	09	01	-	16	43	50	п	23	13	11	12	01
4			NOMA 8	Bowel-complaints.	60	00	80	01	1	п	7	<b>D3</b>		1	1	1	t	9	:	1	1	10	1	1	80	01	7	01	4	1
			1	Injury.	1	16	1	H		2	1	:	-	1	:	1		-	1	:	1	1	01	1	1	-		-	1	-
		0		Other diseases.	10	*	00	10	93	10	1	1	3	90	1	-		10 8	99	01	1	120	14	-	90	6	0	99	0	-
_		Disesse	=	Эле синасы.	98	01	15	15	60	33 1	7	92			00			1 12	4	7	05	16 3	8 65	u ı	. 15	8 22	88	93	34	60
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	MORTALITY		PER 1.0	Fevers.	18.3	*C	14.8	13.7	6,	61	17.5	13.5	0.9	i-	.9	6.83	97	6.	. 80	*		65 61	\$.68	9.6 %.	13.4	. 18	.0 13-1	10.0	191	6.9
60	10000		1,600 OF ARRUN	Bowel-complaints.	9.4	1 4	8.	1.00	**	9	3.0	63		0.	1 6	91	99	6.8	99	-	90	9.1	-	9	4. 3.6	1 1.	1 1	0 1.8	3.6	2.8
	ACCORDING		POPULATION M.	[n]nty.	- 1			9 2.0	4		1	:	:	:		9.8	1			:	. 1		7 1.4	1	8 1.2	19	1	. :	1	
	NG TO		TION	Other diseases.	7.6	9.9	4.9	8.6	18-9	67	3.2	1.9	1	5.3	6.1	9.5	1	6.2	8-3	47	8.6	8.3	9.6	1	7.3	173	6.1	2.7	1.8	
	1		PBB	*sosnvo NF	30.2	15.5	9.58	F-68	28.3	18-9	9.7%	18.9	0.9	19.3	18.4	36.8	66.66	17.9	9.91	9.4	7.3	14.9	47.1	13-8	9.9%	35.4	84-9	14.5	30.7	10.4
0.		-aad -ndo	d to 000,1 -	Ratio of deaths per lation per annur vious week,	54.4	18.6	21.3	49.1	18.9	14.9	35.1	18-9	0.9	1	6.1	8.98	87.0	22.1	1.5	16.4	15.4	19.8	9.68	33.5	15.8	33.0	н	8.08	6.83	9.4
10			DEATHS.	Males.	10	80	6	10	1	21	*	90	-	*	1	1	-	15	*	62	-01	23	31	1	12	18	13	6	11	•
			1	Femnles.	10	91	9	10	63	11	63	01		60	91	-	03	12	:	1	1	23	38	4	ø,	27	31	-	17	
11		Sex	RATIO PER 1,000 OF POPULATION PERANUM.	Males.	90 90 90	9.45	\$.66	19-9	171	2.16	28.2	\$1.4	12.9	15.2	8.01	832.8	117.4	18.5	4.12	11.7	13.8	15.5	42.1	17.4	0.42	27.72	8.55	15.8	\$1.4	20.00
		i,	PER OF TION	Females.	10.00	6.5	19.7	2.05	52 -57 F	15.2	7.00	60	:	8.6	7.88	40.3	9.64	167	:	6.9	i	147	62.53	6.6	8.83	42.4	43.1	13.1	30.1	-
21		-	of saths, deaths, of stand	karto of male devery 100 femals on the conjusted on the tion such mortality the total male an population.	8	390	149	13	-07	141	118	430	No female	2	88	52	92	109	No femul	death.	No femal	death,	88	189	133	13	19	120	104	

	Bengal.
. Health, Camb.,	Commissioner for
Dip. Publ.	Sanitary
GREGG,	
W. H.	

Bardwan Burdwan Bardwan Bardwa	B Cruck olasses.	anbuilt 88 99 99 98 17 7 1 1 5 9 99 99 98 1 7 7 1 1 5 9 99 99 99 99 99 99 99 99 99 99 99 99	ANNUM. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					14			500	100	48	Ago.	RATIO P	BR 1,000	RATIO PER 1,000 OF POPULATION	TEATION	PRE ANNUA	NOW.	
an Burdwan	I I I I I I I I I I Orpek oluesos-	100 Fari,000  10	ANSTON.  Buddbisse,					DEATHS OF				4/	£).	-81	RATIO P	BR 1,660	OP POPU	TATIOS		NAW.	
Burdwan   Burdwan   Burdwan   Burdwan   Burdwan   Burdwan   Burdwan   Bali	Other classes.	embrili 2 2 2 2 2 2 2 2 2 2 2 2 1	i i i i i i i i i		-		-	-				1	1				ALC: CAMPAN				
ore Midnspore 15 7  Hughli and Ohin 8 7  sarah  Sarampore 15  Utterpara 22 10  Howrah 6 1  Krishnagar 6 1  Santipore 1 6  Maraingaal 16 11  Naraingaal 16 11  Dacos 16 11  Naraingaal 18  ong Chittagong 28  h. Patna City 38 8	1111711111	15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	Other clas	I and under 5 years	of and under 10 years.	10 and under 15 years.	years.	years.	years.	years.	60 years and up-	Under 1 year.	.srad unders years.	5 and under 10 years.	of rebut bas of seases.	16 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50	50 and under 60 years.
ore Midnapore	1111711111	20.1 16.5 20.9 20.3 16.8 25.3 7.1	1111	- 1	61		- 1	,	60	87	61	61	78.8	1.99	6.99	•		19.7	9.55	47.1	4.54
Hughli and Ohin-   8   7	111711111	26.2 20.3 16.8 28.3 28.3 7.1	1 1 1	1			1	1	1	01	-	93	0.04	-0 4	,		36.2	E	18.8	14.0	25.3
Serimpore	11711111	20-2 20-3 16-8 23-3 7-1	1 1		1 3	1	60	1	09	1	-	*	8.19	70.3	1	65.3		16.8	1.6	1	0.06
Utterpara	1711111	29.2 116.8 28.3 28.3 7.1	1	1	1 2	41	60	1	60	1		*	116.2	8.83	:	70.3	i	0.65	10.2	1	27.2
	7 1 1 1 1 1	252 252 7.1		1	:	-	1	1		1	1	1	9.969		9.111		1	1	1		1
Krishnagar	11111	5 5 T	1	8.912	4	1	04	1	10	-		ю	126.0	37.2	8.3	15.8	1.1	11.5	1879	13.8	:
Krishnagar	1111	7.7	-	1	1	03	1		1		-	1	ě	62.1	9.46	1	5		1	26.8	60-6
Sansghat 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 2 1 2 1 2 2 1 2 3	1 1 1	E I		1	3 1	1	1	1	1		i	63	314.2	21.1	1	18.2	*	1	243		
Santipore 6 1   Jessore 1 2   Jessore 1 2   Bampore Beaulesh 2 12   Dacon 16 11   Narsingan	1 1		1		1	1	1	1			1	;		1	1	6.69	1	1		ŧ	al.
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Darjiling	1	. 10.5 63.6	9		1 2	.01	.1	1			64	01	128-1	183.4	0.09	,	1	1	1	42.4	88.8
Dacca		V.	1	1		1	6	1	1	1	1		8.634	1	6.88	1	4	26.0	1		1
Chittagong 1 88 2 2 2 88 8	1	. 20.6 14.5			69	:	00	i	gq	4	50	*	137.0	14:1		19.6		8.9	17-8	19.4	6.59
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Comilish 28 28	1	17.9 6.8	: 8	1	-	-	i	1	-	1	1	4	93.4		8.03	1	21.2		15.6	j	1
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	1	16.6 10.2	1	1	4	60	01	1	-	9	9	9	84.2	24.9	9.9	7.5	ı	12.6	13.4	0.11	18.4
Gys Gys 68 6	1	. 54.6 19.4		1	9	*	01	93	10	8	070	16	174.3	6.05	7-65	16.6	8.68	45.4	24.2	81.9	71.2
Arrab 9 2	1	151 8.4		1	4	1	1	1	1		1 8		161.5	H7		ı	4	9.9	1	83.3	16'8
Mozniferpore 13 8		22.6 33.3	:		01	1	1	1	1	-	-	**	881.2	25.7	9.11	1	1	6.1	2.4	20.8	647
Durbhaugs Durbhangs 30 15	1	88.5 44.4		1	-4	9	-	04	00	01		18	267-2	8.14	89.9	9.4	25'9	11.7	8.3	21.0	11.9
Ohupra 31 3	1	40.7 13.1			9 4	I	1		10	60	10.00	*	258-0	\$.09	1	1	6.62	58.5	20.0	8.6	20.3
re Bagulpore 7 9	1	9-2 27-3	3	1	8	-	,	1	1	-	4	4	174-9	8,52	28.9		9	4.8	2.9	16.6	•
Monghyr 30 4	1 1	84.9 16.2	:	-	6	:	:	1	-	99		00	315.2	\$3.4		1	13.8	91.00	17.5	16.8	1
ah Purneah 1 9	1		1		1	1	1		1	1	69	1	183-7	8	1	1	1			ı	0.111
18 ···	T T	7.03	1	1	01	1	:	1	-	11	60	04	1	6.42	1			9.6	25.7	\$1.2	6.69
TOTAL 1 351 116	1 7.6	5 24.1 20.5	1	76.8	1 08	88	18	181	55 47	2 28	17	88	165.0	10 53	12.2	10.3	0.6	18.6	13.9	16.5	9.63

OPPICE OF SANITARY COMMISSIONER FOR BENGAL,

The 17th October 1890.

# Weekly Return of Traffic Receipts on Indian Railways.

# EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 11th October 1890, on 1,525 miles open.

	COACHIN	TRAPPI	c.		BE AND MINI	BAL	Other earning	gs	Total earnin			TRAIN-MIL	es Run.
	Number of passengers.	Receip	pts.	Weight carried.	Receip	ta.	(estimated)		rotal earnin	ga.	Coaching.	Merchan- dise.	Total
		Rs.	A. P.	MD8.	8. Rs.	. P.	Rs. A. 1	P.	Rs. A.	P.	To Start		
Total traffic for the week Or per mile of railway	230,643	2,58,063 169	6 0 2 8	21,07,320	0 4,95,923 325	13 0 1 5	16,800 10 11 0	0 3	7,70,787 18 505 4	0 4	67,5201	79,847	147,8
year	3,076,595	30,68,624	15 0	2,58,88,367 1	0 57,68,632	7 6	2,24,829 8	8	90,62,086 10	2	869,5594	1,063,623}	1,933,18
Total for 15 weeks	3,307,238	33,26,688	5 0	2,79,95,687 1	0 62,64,556	4 6	2,41,629 13	8	98,32,874 7	2	937,080	1,143,470}	2,080,55
COMPARISON.	2 /6:												
Potal for corresponding week of previous year	229,4901	2,61,756	9 6	17,44,963	0 4,23,041	10 6	15,623 15	8	7,00,422 3	8	61,591	67,978	129,50
ing week of previous year lotal to corresponding date of previous year	3,578,271	171 36,03,967	9 5	3,08,74,276 1	277	5 0	2,47,200 11		459 2 1,63,88,161 0		976,163	1,186,214	2,162.5

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works
Department Circular No. XXI, Railway, dated 23rd July 1883.

	es por weer			TS FOR WEEK H OCTOBER 18		AP	RECEIPTS PROTEIL 1889 TO 127 OCTOBER 1889.		AI	RECEIPTS FROM PRIL 1890 TO 11: OCTOBER 1890.		Total	Total
Mean m:leage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts,	Per mile worked.	Mean mileage worked,	Total receipts.		Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in 1890.	decresses 1890.
1,525}	Rs.	Rs.	1,525}	Rs.	Rs.	1,5251	Rs. 2,24,14,912	Rs.	1,5251	Rs. 2,09,51,805	Rs.	Rs.	Es. 14,63,10

#### PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 11th October 1890, on 571 miles open.

	COACHING	TRAFFIC.	MERCHANDISK TRAF			Total earnings.	TRAFFIC '	TRAIN-MILE	s Rus.
	Number of passongers.	Receipts.	Weight carried.	Receipts.	(estimated).	Total earnings.	Coaching.	Merchan- disc.	Total,
Maria de la companya del companya de la companya del companya de la companya de l	+	Rs. A. P.	Mps. 8.	Rs. A. P.	Rs. A. P.	Re. A. P.			
Total traffic for the week Or per mile of railway For previous 14 weeks of half-	*21,871 382§	*14,186 18 0 247 2 4	32,683 30 571 20	2,483 8 0 43 6 8	27 9 0 0 7 9	16,647 14 0 291 0 9	2,0634	436	2,400[
year	136,417	70,938 9 0	4,28,007 0	27,876 11 0	500 5 0	99,315 9 0	15,840	7,726	23,564
Total for 15 weeks COMPARISON.	158,288	85,075 6 0	4,60,690 30	30,360 3 0	527 14 0	1,15,963 7 0	17,903	8,162	26,065
Total for corresponding week of previous year	10,416	5,808 14 8	27,132 0	2,032 6 0	40 7 6	7,881 12 2	1,878	827	2,705
ing week of previous year Total to corresponding date of previous year	182	101 8 10 1,16,210 14 8	474 20 7,17,014 0	35 8 6 33,321 9 0	0 11 4 630 14 6	137 12 8 1,50,163 5 8	21,374	10,920	32,206

<sup>\*</sup> The increase in coaching truffic is on account of pilgrims returning from Gya.

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works
Department Circular No. XXI, Railway, dated 23rd July 1883.

	POR WEEK			H OCTOBER 1		AI	L RECEIPTS FRO PRIL 1889 TO 12 OCTOBER 1889.			PRIL 1890 TO 11 OCTOBER 1890.		Total	Total
Mean nilenge worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week,	Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in 1890.	decrease 1890.
67]	Rs. 7,882	Rs. 138	571	Rs. 16,648	Rs. 291	571	Rs. 2,64,159	Rs. 165	571	Rs. 2,42,708	Rs. 152	Rs.	Rs. 21,651

#### TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 11th October 1890, on 221 miles open.

	COACHING	TRAPPIC.	MERCHANDISE J TRAVE	ND MINERAL	Other earnings	Total	TRAFFIC	TRAIN-MIL	ES RUN.
Har Har	Number of passengers.	Receipts.	Weight carried.	Receipts.	(estimated).	earnings.	Coaching.	Merchan- dise.	Total.
- A.		Rs. A. P.	MDS, S.	Rs. A. P.	Rs. a. P.	Rs. A. P.			CHI.
al traffic for the week	16,360	4,114 10 0 184 14 10	9,851 0	369 11 0 16 9 10	4 10 0 0 3 4	4,488 15 0 201 12 0	923	45	968
previous 14 weeks of half-	225,885	54,603 9 0	65,920 10	2,771 9 0	70 0 0	57,445 2 0	12,618	648	13,266
al traffic for the week per mile of railway previous 14 weeks of half- per Total for 15 weeks	242,245	58,718 3 0	75,771 10	3,141 4 0	74 10 0	61,934 1 0	13,541	693	14,234
COMPARISON.							0	o gale	
al for corresponding week of	19,863	5,080 11 8	11,582 30	295 10 0	10 5 3	5,386 10 11	921	105	1,026
evious year sule of railway correspond- su week of previous year st to corresponding date of nevious year	268,2251	228 5 7 64,768 8 3	91,685 30	13 4 7 2,969 13 0	0 7 5 77 9 9	242 1 7 67,815 15 0	13,861	773	14,634

Approximate Statement of gross receipts of the Tarkessur Branch Railway, prepared in accordance with Public Works
Department Circular No. XXI, Railway, dated 23rd July 1883.

CELPTO 1211	FOR WEEK	ENDING 889.		TS FOR WEEK H OCTOBER 1			RECEIPTS FRO PRIL 1889 TO 12 OCTOBER 1889	TH		L RECEIPTS FRO PRIL 1890 TO 11 OCTOBER 1890.		Total	Total
fean seage graed.	Receipts.		Mean mileage worked.	Receipts.		Mean mileage worked.	Total receipts,	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in 1890.	decrease in 1890.
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	0.14	Rs.	Rs.	Rs.	Re.
20)	5,387	242	221	4,489	202	221	1,50,453	241	221	1,46,782	236	188	3,671

# EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Behar Sections.)

Approximate Return of Traffic for week ended 4th October 1890, on 763 miles open.

	COACHING	G TRAFFI	ic.	MEBCHA		FAND MIN	FRA	L	Other es	rning	s Tot	al.		TRAFFIC	TRAIN-MILE	S RUN.
	Number of passengers.	Coachi		Weig		Recei	pts,		steam-t	ling	earni			Coaching.	Merchan- dise.	Total.
		Rs.	A., P	MD	8. 8.	Rs.	A. 1		Rs.	A. P.	Rs.	A. 1	P.		- 1910	
tal traffic for the week  per mile of railway  previous 13 weeks of half-	159,814 209	62,540 82	0 0		12 0 40 0	1,69,690 222	0 0		12,510 †1	0 0	2,44,740			18,542	36,522	55,064
par	1,756,048	7,18,669	0 0	72,52,4	81 0	17,90,515	0 (	)	1,93,962	0 0	*27,03,146	0	0	283,405	417,236	700,641
Total for 14 weeks Comparison.	1,915,862	7,81,209	0 0	78,93,3	93 0	19,60,205	0	0	2,06,472	9 0	29,47,886	0	0	801,947	453,758	755,70
tal for corresponding week	177,860	70,958	0 (	7,61,	43 0	2,05,695	0	0	16,337	0 0	2,92,990	0	0	23,086	39,558	62,64
tal to corresponding date of	238	95	0 (	1,0	020 0	275	0	0	+1	0 0	371	0	0		*******	*****
Previous year	1,958,639	8,35,936	0 0	88,65,5	57 0	21,17,823	0	0	2,19,408	0 0	31,73,167	0	0	314,314	438,312	752,62

<sup>•</sup> Audited up to week ending 30th August 1890. † Excluding steamer earnings.

# FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

bri	S FOR WEEK I OCTOBER 18	ENDING 89.	RECEIP?	TS FOR WERK A OCTOBER 18	ENDING 90.		PRIL 1889 TO 5: OCTOBER 1889.		A	PRIL 1890 TO 47 OCTOBER 1890.		Total	Total
Esan Beage sted.	Receipts,	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Potal receipts.	Per mile worked per week.	Mean mileage.	Total receipts.	Per mile worked per week.	increase in 1890.	decrease is
167	Rs. 2,92,990	Rs. 392	763	Rs. 2,44,740	Re. 321	711	Rs. 53,08,609	Rs. 276	759	Rs.	Rs. 260	Rs. 21,935	Rs.

Audited up to week ending 30th August 1890.

#### BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 4th October 1890, on 125 miles open.

	COACHING	TRAFFIC.		MERCHAND		AND MIN	RH	AL	Other ea			Total			TRAPPIC	TRAIN-MIL	RS R
	Number of passengers.	Coaching receipts.		Weight carried.		Receip	ota,		(estima			earnin			Coaching.	Merchan- dise,	7
Active and the second s		Rs. A.	P.	MDS.	8.	Rs.	٨.	р.	Re.		. р.	Rs.	۸.	P.	Line I		T
Total traffic for the week Or per mile of railway	81,745 254	8,770 0 70 0		69,407 555	0	7,120 57	0				0	15,980 128			3,668	2,000	
For previous 13 weeks of half-	317,984	97,939 0	0	4,58,824	0	34,627	0	0	2,378	0	0	*1,34,944	0	0	45,975	28,892	
Total for 14 weeks COMPARISON.	349,729	1,06,709 0	0	5,28,231	0	41,747	0	0	2,468	0	0	1,50,924	0	0	49,643	28,892	
Total for corresponding week of previous year Per mile of railway correspond- ing period of previous year	36,064	10,983 0 88 0		70,682 565		8,126 65			0.00		0	19,198	1000	LIZ:	8,572	2,932	
Total to corresponding date of previous year	389,610	1,28,410 0	0	9,08,787	0	86,394	0	0	2,651	•	0	9,37,455	0	0	48,958	35,946	1

<sup>\*</sup> Audited up to week ending 30th August 1890.

#### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIP 57	TS POR WEEK		RECEIPT 4TE	S FOR WEEK	RNDING 890.		L RECEIPTS PRO 1889 TO 5TH OC 1889.			1890 TO 4TH OC 1890.		Total	Total
Mean mileage worked.	* Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked,	Total receipts.	Per mile worked per week.	increase in 1890.	decrease 1800,
125	Rs. 19,198	Rs. 154	125	Rs. 15,980	Rs. 128	125	Rs. 3,97,392	Rs.	125	Rs. *3,16,432	Rs. 94	Rs.	Ba. 80,870

<sup>\*</sup> Audited up to week ending 30th August 1890.

#### DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 4th October 1890, on 86 miles open.

	COACHIN	TRAFFIC	. "	MERCHAND		NIO MINE	RAL	Other earnin	10'8	Total		TRAPPIC	TRAIN-MII	RS R
	Number of passengers.	Coachin		Weight carried.	1	Receipts		(estimated)		earning		Coaching.	Merchan- dise.	To
		Rs.	A. P.	Mps.	в.	Rs. A	. P.	Rs. A.	P.	Rs.	A. P	4		
Potal traffic for the week Or per mile of railway For previous 13 weeks of half-	17,061 198	5,720 67	0 0	24,371 283	0	2,100 24	0 0	190 0 2 0		8,010 93	0 0		705	
year	191,132	59,979	0 0	1,68,865	0	14,309	0 0	3,886 0	0	*78,174	0 0	30,726	9,206	3
Total for 14 weeks COMPARISON.	208,193	65,699	0 0	1,93,236	0	16,400	0 0	4,076 0	0	86,184	0 (	33,141	9,971	-
Total for corresponding week of previous year	13,815	4,183	0 0	34,778	0	3,002	0 0	80 0	0	7,265	0 (	2,538	1,013	
period of previous year	161	64,446	0 0	2,90,922	0	35 21,109		3,169 0	7.01	85 88,724	0 0	900	12,778	

<sup>\*</sup> Audited up to week ending 30th August 1890.

#### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

	OCTOBER 188		RECEIPT 4TH	S FOR WEEK		Δ	RECEIPTS PRO PRIL 1889 TO 5T OCTOBER 1889.			PRIL 1890 TO 41 OCTOBER 1890.	THE SEC	Total	Tota
Mean mileage worked,	Receipts.		Mean mileage worked.	Receipts.		Mean mileage worked.			Mean mileage worked,		Per mile worked per week.	increase in 1890.	detrease 1890.
	Rs.	Rs.		Rs.	Rs.	1000	Rs.	Rs.		Ra.	Rs.	Rs.	Rs.
86	7,265	85	86	8,010	93	86	1,63,003	70	86	*1,68,045	72	5,042	-

<sup>.</sup> Audited up to week ending 30th August 1890.

#### NALHATI STATE RAILWAY.

Approximate Return of Traffic for week ended 4th October 1890, on 271 miles open.

	COACHING	TRAFF	ic.			AND MINERA	8	Other earnings	Total	THAPPIC	TRAIN-MILE	ES RUN.
	Number of passengers.  2,621 96 37,316	Coach		Weight carr	ied.	Receipts.		(estimated).	earnings.	Coaching.	Merchan- dise.	Total.
		Rs.	A. P	MD8.	8.	Rs. A. P		Rs. A. P.	Rs. A. P.	Light		rr arell
al traffic for the week per mile of railway previous 13 weeks of half-			0 0			1,090 0 0		40 0 0	2,020 0 0 74 0 0		170	756
previous 15 weeks of dail-	37,316	13,036	0 0	1,18,605	0	6,174 0 0	)	199 0 0	*19,409 0 0	7,012	5,044	12,056
Total for 14 weeks	39,937	13,956	0 0	1,32,408	0	7,264 0 0		209 0 0	21,429 0 0	7,593	5,214	13,806
tal for corresponding week	2,680	1,086			100	222 0 0		651 0 0	1,959 0 0		340	926
or period of previous year al to corresponding date of revious year	98 42,012	15,428	0 0	17	100	8 0 0	1	24 0 0 1,283 0 0	72 0 0 25,188 0 0		5,241	13,295

<sup>\*</sup> Andited up to week ending 30th August 1980.

#### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

STHE	rs for week October 188			TS FOR WEEK OCTOBER 18			L RECRIPTS PRO PRIL 1889 TO 5 OCTOBER 1889.			RECEIPTS FEC PRIL 1890 TO 4 OCTOBER 1890.	LH	Total	Total
lean sage gied.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	increase in	decrease in 1890.
m	Rs. 1,959	Rs. 72	272	Rs. 2,020	Rs. 74	271	Rs. 50,717	Rs.	271	Rs. *47,441	Rs. 64	Rs.	Rs. 3,276

<sup>\*</sup> Audited up to week ending 30th August 1890.

# BENGAL AND NORTH-WESTERN AND TIRHOOT RAILWAYS.

COMBINED SYSTEM.

Approximate Keturn of Traffic for week ended 4th October 1890, on 691 miles open.

	COACHING	TRAPPIC.		AND MINERAL FFIC.	Other earnings (estimated),	Total	TRAPPIO	TRAIN-MIL	BS RUN.
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.	including steam-boat earnings.	enrnings.	Coaching.	Merchan- dise.	Total.
traffic for the week (on 691		Rs.	MDS.	Rs.	Rs.	Rs.			
es open; st mile of railway previous 12 weeks of half-	72,660 105'15	30,530 44°18	2,19,760 318:03	30,220 43.73	6,210 8'99	96,960 96'90	12,662	11,105	23,767
g	931,240	3,58,029	32,07,004	8,77,760	81,867	8,18,556	151,693	143,517	295,210
Total for 13 Weeks Companison.	(a)1,003,900	3,89,459	(6) 34,26,764	4,07,980	*88,077	8,85,516	164,355	154,622	318,977
Audited figures. Inforcerresponding week of Housyear His of corresponding week	73,616	25,457	2,13,226	19,250	6,735	51,451	10,481	11,083	21,564
to corresponding date of	113.43	89-22	328.55	29.67	10.38	79.27		****	
mious year	1,009,382	3,69,251	35,97,993	4,32,116	1,12,730	9,14,027	155,696	177,979	333,674

<sup>\*</sup> Steam-boat earnings for the week, Rs. 5,350.

Ditto to date, ,, 65,510.

#### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal and North-Western and Tirhoot Railways.

tre October 1899,		RECEIPT 5TH	PTS FOR WEEK ENDING TH OCTOBER 1889.		TOTAL RECRIPTS FROM 18T  APRIL 1890 TO 4TH  OCTOBER 1890.  TOTAL RECRIPTS FROM 18T  APRIL 1889 TO  STR OCTOBER 1889.			- 10				
Receipts.	Per mile worked.	Mean mileage worked.	Receipts.		Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Total increase in 1890-91.	Total decrease iz 1890-91.
Re.	Re.		Rs.	Ra.		Re.	Rs.		Rs.	Re.	Re.	Rs.
66,960	96.50	649	51,451	79-27	671	22,09,196	123-24	649	22,29,750	127-92		20,554

<sup>(</sup>a) Excludes 37,283 possengers, being traffic common to B. and N.-W. and T. Railways.
(b) Do. 1,55,594 maunds, ditto ditto ditto.

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# The Calcutta Gazette.

WEDNESDAY, OCTOBER 29, 1890.

# OFFICIAL PAPERS.

Non-Subscribers to the Gazette may receive the Supplement separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.

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#### FINANCIAL DEPARTMENT.

#### FINANCE.

Darjeeling, the 19th October 1890.

#### RESOLUTION.

The Lieutenant-Governor is now in a position to review the actual financial results of the year 1888-89, the revised estimates for the year 1889-90, and the budget estimates for 1890-91. The Accountant-General's memorandum on the accounts of the first year has just been received, and the Government of India have considered the estimates which the Local Government formed of its financial position at the close of the past year, and of the funds at its disposal during the current year.

#### Part I.

#### ACCOUNTS OF 1888-89.

2. The revised estimate adopted in the Financial Resolution of the 28th September 1889 assumed that the year 1888-89 had opened with a credit balance of Rs. 33,09,000 and closed with a credit balance of Rs. 28,29,000, that the total amount available for expenditure was Rs. 5,22,10,000, and that Rs. 4,93,81,000 had been spent. The actual result was less favourable than this estimate by Rs. 1,77,917. The amount actually available for expenditure was Rs. 5,20,86,994, and the amount actually expended Rs. 4,94,35,920. The closing credit balance was Rs. 26,51,074. The following statement will show to what extent the anticipations formed at the beginning of the year were actually realized under each major head of account:—

RECEIPTS.	Revised estimate for 1888-89, adopted in September 1889.	Actuals, 1888-89,	Exprediture.	Revised estimate for 1888-89, adopted in September 1889.	Actuals, 1888-89.
Opening balance	Rs. 33,09,000	Rs. 33,68,991	Direct demand on the Revenues—	Rs.	Rs.
Principal Heads of Revenue— 1.—Land Re-{Proper venue, {Adjustments III.—Salt IV.—Stamps	95,94,000 -4,07,000 88,000 1,03,79,000 27,23,000	95,87,775 -5,61,838 88,195 1,63,79,239 27,22,910	1. Refunds and drawbacks 2. Assignments and compensations 3. Land Revenue	1,42,000 1,39,000 85,12,000 21,000 3,70,000 1,09,000	1,40,156 1,39,300 35,13,059 21,223 3,70,334
V.—Excise	41,46,000 47,060 19,56,000 3,38,000 5,47,000	41,56,323 46,891 19,55,698 8,38,454 5,46,779	8. Provincial Rates	3,17,000 5,24,000 75,000 1,87,000 3,00,000	1,08,602 3,17,410 5,24,020 74,865 1,88,102 2,99,730
Total	2,94,21,000	2,93,20,419	Total	56,96,000	56,96,801
XII.—Interest	1,20,000	97,383	13. Interest on ordinary debt 14. Do, on other obligations	46,000 6,000	45,802
Posto-ffice, Telegraph, and Mint— XIV.—Telegraphs	1,000	926	Post-Office, Telegraph, and Mint-	1,000	884
			Salaries and expenses of Civil Department—		100 74
Receipts by Civil Department—XVI.—Law and Justice—Courts of Law Jails XVII.—Police	7,90,000 7,75,000 3,38,000 9,05,000	7,89,538 7,75,021 3,38,197 9,11,783	18. General Administration  19. Law and Justice— Courts of Law	16,02,000 81,02,000 17,96,000 48,37,400 9,88,040 24,58,400	15,71,095 81,01,736 17,95,795 48,34,099 10,71,198
XII.—Bducation	6,11,900 1,3d,000	6,11,884 1,86,165	24. Medical	14,88,000 24,000	24,58,200 14,87,730 24,462
Departments	1,65,000	1,65,154	Departments	3,14,000	3,10,050
Total	37,20,000	87,27,692	Total	2,16,09,000	2,16,54,365
Miscellaneous— XXII.—Receipts in aid of Super- anuation XXIII.—Stationery and Printing	49,000 1,75,000	48,849 1,75,073	Miscellaneons—  29. Superannuation, &c  30. Stationery and Printing  82. Miscellaneous	13,70,000 10,21,000	13,70,007 10,21,438
XXV.—Miscellaneous	8,42,000	8,34,785		2,26,000	2,40,632
Total	10,66,000	10,58,707	Total Famine Relief and Insurance— 33. Famine Relief	26,17,000	26,32,077
			37. Construction of Railways	-11,000	54,338 -10,803
Railways— XXVI.—State Railways (gross earn-			Railways (Revenue account)— 88. State Bailways—	in Masshers	Turing to
ings) — Bastern Bengal State Rail- way Other Railways	61,65,000 55,69,000	61.64,804 55,69,065	Working ex. Eastern Bengal State Railway Other Railways	31,65,000 27,84,000	31,64,804 27,84,208
Total	1,17,34,000	1,17,33,869	Interest on debt 40. Subsidized Companies—Land,	82,61,000	32,61,382
	7. 15		41. Miscellaneous Railway expen-	••••	-366
	and the second	Principal S	diture Total	1,43,600	1,42,692
Irrigation— XXIX.—Major works (direct receipts) XXX.—Minor works and Naviga-	13,94,000	13,94,389	Irrigation— 42. Major works— Working expenses Literest on debt	93,53,000 14,18,000 23,40,000	93,52,715 14,18,090 23,39,849
By Public Works Department By Civil Department	8,68,000	8,67,844	43. Minor works and Navigation— By Public Works Depart- ment By Civil Department	14,76,000	14,75,746
Total	23,64,000	23,64,367	meta)	2,000	1,911
A supplied to the	20,04,000	10,00,000	Buildings and Roads—	52,36,000	52,35,596
Buildings and Roads— XXXII,—Qivil works—	CONTRACTOR OF THE STATE OF THE		By Public Works Department By Civil Department	39,04,000 1,20,000	39,94,303 1,19,658
By Public Works Depart-		Higher	Total	40,24,000	40,23,961
By Civil Department	2,00,000 2,75,006	2,00,076 2,74,564	Contributions	7,50,000	7,50,186
Total	4,75,000	4,74,640	Total	4,93,81,000	4,94,35,920
Contributions	******		Closing;balance	28,29,000	26,51,074
Total	4,89,01,000	4,87,78,003	GRAND TOTAL	5,22,10,000	5,20,86,994
GRAND TOTAL	5,22,10,000	5,20,86,994	Provincial surplus (+) or deficit	-4,80,000	-6,57,917

# REVENUE.

3. The net decrease of Rs. 1,22,997 under the head of Receipts is principally due to the fact that no credit was afforded to Provincial Revenues for the assignment made by the Government of India on account of the cost of the construction of a vessel to replace the pilot brig Cassandra, and for which a provision of one lakh was included in the revised estimate. The total cost on account of the

brig has been adjusted in the accounts of 1889-90. The principal change introduced into the accounts of 1888-89 is the reclassification of loans and advances, the control of which has been made over to the Provincial Government. The interest on these loans received during the year amounted to Rs. 24,820, viz. —

On loans to Municipalities an Presidency Corporation				 1,324
On loans to landholders and ot	her not	abilities		 345
On advances to cultivators			*** ****	 12,192
On advances under special laws		•••	0.00	 10,959

The 4 per cent. payable to the Imperial Revenues on the amount advanced from the treasury amounted to Rs. 45,802, and the difference between the two amounts, Rs. 20,982, has been credited to Provincial under the head of Land Revenue.

#### EXPENDITURE.

4. The actual expenditure shows a net increase of Rs. 54,920 compared with the revised estimate. There was an increase of Rs. 83,198 under "Marine," in consequence of larger payments made than were anticipated to the Government Dockyard at Bombay for the cost of building the pilot brig to replace the Cassandra. The final adjustment of accounts also caused an increase of Rs. 14,632 under "Miscellaneous." Against these increases there was a decrease of Rs. 30,905 under "General Administration," caused chiefly by the restricted expenditure under "Tour expenses of the Lieutenant-Governor" and by savings under "Commissioners" on account of privilege leave absences of officers during the year. There were also small decreases under "Police" and "Scientific and other Minor Departments."

5. The transactions of the Provincial loans and advances not included

in the cash account are as follow:-

		1888-89.	
	Outgoings.	Receipts.	Closing balance
	Rs.	Rs.	Rs.
Advances to cultivators, &cLoans under the			
Land Improvement Act XIX of 1883	2,44,714	56,283	1,88,481
Advances to cultivators under Act XIII of 1884	2,07,851	26,849	1,81,002
Famine advances	5,318	4,731	587
Advances under special law-Zemindary embank-			
ment advances	1,50,067	29,756	1,20,311
Drainage advances—	Haring Asserting		West Constitution
Ampta drainage	52		52
Howrah do	2,94,868	24	2,94,844
Nuddea do	290	*****	290
Rajapore do	5,45,590		5,45,590
Dancoonee do	73,555	33,060	40,495
Protapkhally do	12		12
Loans to landholders	19,000	255	18,745
Do. to Darjeeling Municipality	28,960	1,771	27,189
Do. to Mirza Mahomed Hossain's Fund	505	205	300
Total	15,70,782	1,52,884	14,17,898

#### Part II.

## REVISED ESTIMATE, 1889-90.

6. A revised estimate, based on the actuals of eight months, was submitted to the Government of India with letter No. F  $\frac{1-E}{41}$  62, dated 30th January 1890. A few important changes in these estimates were again reported on the

6th March 1890. The year has now expired, and although the account has not yet been finally closed and is still open to adjustment, there are sufficient materials to make an approximate estimate of the actual financial position of the province at the close of the year. The following statement shows the revised estimates as framed by the Local Government, the estimates as modified by the Government of India, and the estimates as now adopted with reference to the preliminary actuals of the year:—

RECEIPTS.	Revised estimate, Bengal Govern- ment,	Revised estimate passed by Govern- ment of India.	Revised estimate now adopt- ed.	Expenditure.	Revised estimate, Bengal Govern- ment,	Revised estimate passed by Govern- ment of India.	Revise estima now add ed,
ppening balance	Rs. 26,51,000	Rs. 26,51,000	Rs. 26,51,000	Direct demand on the verences—  1. Refunds and drawbacks	Rs. 1,38,000 1,54,000	Rs. 1,34,000 1,54,000	1,50
Trincipal heads of revenue	90,13,000 1,18,000 1,05,75,000 25,50,000 42,27,000 50,000 20,00,000 3,85,000 5,75,000	1,01,84,000 1,18,000 1,06,50,000 25,50,000 45,00,000 50,000 20,25,000 3,65,000 5,87,000	1,03,98,000 1,24,000 1,06,78,000 26,19,000 43,-6,030 55,000 20,83,000 3,84,000 6,00,000	3. Land Revenue 5. Salt 6. Stamps 7. Excise 8. Provincial Rates 9. Customs 10. Assessed Taxes 11. Forests 12. Registration	35,24,0 m 83,000 8,71,0 m 1,34,000 8,25,000 5,35,000 81,000 2,25,000 3,15,000	35,36,400 89,000 3,8×,000 1,34,000 5,35,000 5,35,000 2,05,000 3,15,000	1,55 35,67 46 3,83 1,40 3,07 5,30 81 1,90 3,11
	2,94,98,000	3,08,29,000	3,11,57,000	Total	58,91,000	59,10,000	59,0
XIIInterest	1,15,000	1,15,000	1,03,000	13. Interest on ordinary debt	75,000	75,000	6
Post-office, Telegraph, and Mint— XIV.—Telegraphs	1,000	1,000	1,000	Post-office, Telegraph, and Mint— 16. Telegraphs	1,000	1,000	
Receipts by Civil Department— XVI.—Law and Justice— Conts of Law Jails XVII.—Police XVIII.—Marine XXI.—Education XX.—Medical XXI.—Sciontific and other Minor Departments.	7,90,000 7,45,000 4,06,000 8,00,000 5,70,000 1,36,000	7,90,000 7,45,000 4,06,000 8,60,000 5,70,000 1,36,000 1,76,000	8,08,000 8,04,000 4,27,000 8,54,0-0 5,70,000 1,45,000	Salaries and expenses of Civil Department	17,80,006 53,12,000 11,48,000 24,73,000 15,02,000 24,000	15,93,000 81,31,000 18,20,000 53,12,000 11,48,000 24,44,000 15,22,000 24,000	15, 81, 19, 58, 11, 94, 15,
Total	36,83,000	36,83,000	38,20,000	26. Scientific and other Minor Departments.	3,05,000	3,05,000	8,5
Miscellaneous-				Total	2,22,17,000	2,22,94,000	2,35,
XXII.—Receipts in aid of Super- annuation.  XXIII.—Stationery and Printing  XXV.—Miscellaneous	46,000 1,60,000 8,28,000	1,60,000	1,50,000	Miscellaneous— 29. Superannuation, &c. 30. Stationary and Printing 32. Miscellaneous Total	10,13,0 0 2,19,000	14,35,000 10,13,000 2,19,000 26,67,000	2,
Total	10,34,000	10,34,000	10,01,000		20,00,000	20,07,000	
Railways— XXXVI.—State Railways (gross earning-)—		alle Turk		Famine Relief and Insurance— 33. Famine Relief	3,75,0 0	3,75,000	1
Eastern Bengal State Rail- way.	63,50,000	63,15,000	61,01,000	37. Construction of Railways	-2,100	2,000	
Other Railways	59,39,000	1000		Railways (Revenue account)— 38. State Railways—			
Total	1,22,89,000	1,26,01,000	1,25,04,000	Working State Railway.	De William Strift	33,15,000	100
Berigation—				Interest on debt  40. Subsidized Companies—Land, & 41. Miscellaneous Railway expenditur	34,45,000	34,41,000	3/
				The state of the s	96,62,000	96,06,000	96
XXIX.—Major works (direct receipts).  XXX.—Min r works and Navigation—	7241171	100		Interest on debt	14,36,000 23,68,000		
By Public Works De-	1			43. Minor works and Navigation— By Public Works Department	16,96,000	16,96,000	1
By Civil Department Total	2,03,000	40.00			2,000	2,000	
Total	23,47,000	23,41,000	24,18,090	Buildings and roads—	55,02,000	55,00,000	0 51
Baildings and roads—		A CONTRACTOR		45. Civil works— By Public Works Departmen		29,78,000	3
XXXIICivil works -	9 4		STATE OF	The Control of the Co	60,000	60,000	-
By Public Works De-	2,79,000	2,42,000	2,53,000	Contributions	30,38,000		-
By Civil Department	3,00,000	3,00,000	3,17,000	Total Control	5 92 17 000		-
Total	5,79,00	5,42,00	5,70,000	Closing balances	5,02,17,000		-
Contributions				Grayn Tonax	T	Commission of the	and the same
Total	4,95,46,00	_		The state of the s	or (-)6,71,00		-
GRAND TOTAL	. 5,21,97,60	0 5,38,00,00	0 5,42,25,000	deficit (-)	( )0,71,00	1 10,00,00	0100

#### RECEIPTS.

7. Land Revenue.—The total Land Revenue receipts for the year 1889-90, as estimated by the Local Government in January last, amounted to

Rs. 3,82,59,000, and this estimate was raised by the Government of India to Rs. 3,86,50,000. The Comptroller-General's statements show that the total collections in 1889-90 were Rs. 3,89,05,000. The 10 per cent. on collections from Government estates amounts to Rs. 4,14,000, and the total Provincial share of land revenue for the year is therefore one-fourth of (Rs. 3,89,05,000— Rs. 4,14,000) + Rs. 4,14,000, or Rs. 1,00,37,000. This amount has been taken as the revised estimate of Provincial share of Land Revenue (proper) for 1839-90. The adjustments between Imperial and Provincial will result in a net credit for Rs. 2,71,208 to the latter as shown below:

	Estimate of the Government of Bengal.	Estimate of the Government of India.	Revised esti- mate now adopted.
The state of the s	Rs.	Rs.	Rs.
Fixed contribution to Imperial	6,90,000	-6,90,000	-6,90,000
For special contribution to Imperial	-10,00,000		The same of
" new pilot brig	1.1 50.000	+1.50,000	+1.91.423
,, Orissa Coast Canal	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+1.81,000	+1.81.000
Hidaellas Widel Canal	11 85 000	+1,85,000	+1.85 000
" Interest on exchange, State Railways	+93,000	+93,000	+93,000
Hiro of the steamen House	+7,000		*****
Inter provincial adjustments	19,000	+30,000	+46,621
Adington and for Chaighannons worm	1.12.000	+24,000	+22,647
Rangal mada mm			-10.261
gania	44 000	-48,000	-48,060
Half the cost of the Special Branch	A CONTRACTOR OF THE PARTY OF TH	IV. TO THE REAL PROPERTY.	The court of the c
of the Police Office	+5,000	+5,000	+1,292
Mr Killy's salt-weighing machine	1.00.000	+33,000	+33,000
Custom House Ammeigans	1.8 000	+8,000	+7,280
Conservation of ancient monuments	The state of the s	+1,000	+1,000
Datroloum Wharf Katablishment	1 1 000	+4,000	+4,000
Assemmedation for the Wharf Officer		14,000	1 2,000
at Duday Daday	The state of the s		+25,000
Ti D. 1 D. 1 D. 1	1.41.000	+41.000	+41,000
	1.97.000	+21,000	
" Political charges Trial borings of seams of coal in Sontha		T21,000	+21,000
Description	4 000	-4,000	-4,475
Pergunnahs	1.0 00,000	+2,00,000	+2,00,000
Den at Common abaness	9 000	-3,000	
" Forest Survey charges		-3,000	-2,900
" New method of testing by distillation the strength of imported spirits	+3,000	+3,000	+2,500
, Adjustment on account of new classi- fication of rewards out of crimina		10,000	72,000
fines in Excise and Stamp cases		Torus .	-28,859
Total	-8,34,000	+2,34,000	+2,71,208
	THE RESERVE OF THE PERSON NAMED IN COLUMN 1	THE RESERVE THE PROPERTY OF THE PARTY OF THE	

The addition of Rs. 2,71,000 to the Provincial share of Land Revenue against a net credit for Rs. 8,34,000 to Imperial provided for in the revised estimate of the Local Government is chiefly due to the decision of the Government of India to appropriate the special contribution of 10 lakhs in 1890-91 instead of in 1889-90.

8. Salt.—The original estimate under this head was raised from Rs. 83,000 to Rs. 1,18,000 in consequence of the increase under "Rents of warehouses," caused chiefly by the reduction of the rate of rent from Rs. 5 to Rs. 3 for 1,000 maunds of salt bonded. The amount of salt bonded during the year was the largest on record, and the salt was kept longer in the golahs than formerly. The actual Provincial receipts have amounted to Rs. 1,24,000.

9. Stamps.—The revised estimate of the Local Government under this head, amounting to Rs. 1,05,75,000 (Provincial share), was raised to Rs. 1,06,50,000 by the Government of India. The Comptroller-General's statements show that the total receipts amounted to Rs. 1,42,38,000. The revised estimate of Provincial share has accordingly now been placed at Rs. 1,06,78,000.

The increase was chiefly under court-fee stamps.

10. Excise.—The estimate of receipts under this head was originally placed by the Accountant-General at Rs. 1,11,09,000, but was reduced by the Local Government to Rs. 1,05,00,000, and this amount was passed by the Government of India. The results of the settlement of shops for the sale of country spirits having shown a decrease of more than 8 lakhs in license fees as compared with

the actuals of 1888-89, the estimate was reduced to Rs. 1,02,00,000 in the Financial Resolution dated the 28th September 1889, and the same figure was adopted in the revised estimate of the Government of India. The latest returns show that the total receipts of the year were not less than Rs. 1,04,75,000, and one-fourth of this, or Rs. 26,19,000, has been taken as the revised estimate of the Provincial share.

11. Assessed Taxes.—The revised estimate of the Local Government under this head, amounting Rs. 40,00,000, was raised by the Government of India to Rs. 40,50,000. The actuals amounted to Rs. 41,66,000, and half of this, or Rs. 20,83,000, has been taken as the revised estimate of the Provincial share. The greater portion of the increase was due to the careful revision of assessments in Calcutta.

12. The total receipts of the Civil Department amount to Rs. 38,20,000 against Rs. 36,83,000, the revised estimate adopted in the Financial Statement. The increase was chiefly under Jails.

13. Railways.—The following statement compares the estimates as originally proposed by the Local Government with those passed by the Government of India and those now adopted:—

		Revised esti- mate passed by the Local	Revised esti- mate passed by the Govern-	Revised esti- mate now adopted.
Receipts—		Government.	ment of India.	mophan
NECEIPIS—		Rs.	Rs.	Rs.
Eastern Bengal Other sections of the Eastern	Bangal	72,23,000	74,65,000	72,70,000
System		37,77,000	39,85,000	41,87,000
T + 1 T + S+-		1 10 00 000	1.14.50.000	1.14.57 000
Total Eastern System		1,10,00,000	1,14,50,000	1,14,57,000
Tirhoot		20,61,000	22,00,000	21,12,000
Nalhati	***	1,01,000	1,01,000	1,04,000
Total		1,31,62,000	1,37,51,000	1,36,73,000
Expenditure—				
Eastern Bengal		33,50,000	33,15,000	31,01,000
Other sections of the Eastern	Bengal			
System		17,50,000	17,35,000	20,02,000
Total Eastern System		51,00,000	50,50,000	51,03,000
Tirhoot		9,55,000	9,55,000	9,06,000
Nalhati		76,000	76,000	76,000
Total		61,31,000	60,81,000	60,85,000
	100			
NET RECEIPTS-	A TREE			
Eastern Bengal Others Sections of the	Venter.	38,73,000	41,50,000	41,69,000
Others Sections of the Bengal System	Eastern	20,27,000	22,50,000	21,85,000
Total Eastern System		59,00,000	64,00,000	63,54,000
Tirhoot	1	11,06,000	12,45,000	12,06,000
Nalhati		25,000	25,000	28,000
Deduct excess of net rec	eipts of	70,31,000	76,70,000	75,88,000
the Eastern Bengal or	ver the	8 72 000	11 50 000	11 20 000
contract assignment of 30	Idkiis	8,73,000	11,50,000	11,69,000
Total Provincial		61,58,000	65,20,000	64,19,000
		4		

# The total Provincial gross receipts amounted to Rs. 1,25,04,000, thus:-

		ern Bengal er the contract	assignment	:::		Rs. 72,70,000 11,69,000
						61.01.000
	aer Se	ctions of the I	Eastern Benga	1 System		61,01,000 41,87,000
Tirhoot	***			•••		21,12,000
Nalhati			1000	***		1,04,000
				Total		1,25,04,000

14. Irrigation—Major Works.—The original estimate of Rs. 13,58,000 under this head was increased to Rs. 14,44,000 in the revised estimate, but the actuals amount to Rs. 15,21,000. The excess has been general, but is most marked on

the Orissa and Sone projects.

15. Civil Works.—The receipts in charge of the Public Works Department were originally estimated at Rs. 3,75,000, but owing to the sale of the Burrakur Iron Works, and to the Akra Brick Factory having been leased out, a reduction was anticipated, and the revised estimate was placed at Rs. 2,42,000. The actual result has been better than this by Rs. 11,000, owing to the apportionment of the sale proceeds of the Burrakur Iron Works between Imperial and Provincial Funds having been made on the basis of the actual capital outlay to end of 1889-90 instead of on the outlay to end of 1888-89 as originally made.

#### EXPENDITURE.

16. Land Revenue.—The estimate of the Local Government was raised by the Government of India by Rs. 12,000, in order to accord with the survey estimates passed in Finance and Commerce Department Resolution No. 736, dated the 12th February 1890. The latest information shows that the total expenditure under this head is not less than Rs. 35,67,000, and this figure has been taken as the revised estimate for 1889-90.

17. Salt.—The original estimate, amounting to Rs. 22,000, was raised by Rs. 67,000 to provide for the cost of Kilby's patent scales for the weighment of salt, the introduction of which into the Port of Calcutta was sanctioned by Government in July 1889. But as Rs. 15,685 could only be spent on this account in 1889-90, the estimate has been reduced to Rs. 46,000, which is the amount reported to have been actually spent during the year.

18. Forests.—The Government of India have reduced the estimate of the Local Government under this head from Rs. 4,50,000 to Rs. 4,10,000. The expenditure amounts to Rs. 3,90,000, and the revised estimate of the Provincial

share has been placed at Rs. 1,95,000.

19. General Administration.—There was larger expenditure under "Commissioners" than had been provided for in the revised estimate, and the total estimate now stands at Rs. 16,16,000 against Rs. 15,93,000, the estimate passed

by the Government of India.

20. Law and Justice.—Courts of Law.—The estimate of the Local Government under "Civil and Sessions Courts" was raised by the Government of India by Rs. 29,000 with reference to later actuals than were available when the estimate was submitted by this Government. The actual charges under the heads "High Court," "Law Officers," "Civil and Sessions Court," and "Criminal Courts" exceeded the estimates, and the total expenditure is not less than Rs. 81,58,000.

21. Jails.—The increase under "Jail Manufactures" was attended with a corresponding increase under receipts. The revised estimate now stands at Rs. 19,00,000 against Rs. 18,20,000 passed by the Government of India.

22. Marine.—There has been an increase of expenditure under "Purchase and hire of ships and vessels" and "Purchase of marine stores and coal for the building, repairs, and outfit of ships and vessels." The total charges are Rs. 12,03,000 against Rs. 11,48,000, the estimate passed by the Government of India.

23. Education.—There was an increase of expenditure under "Inspection" and "Scholarships," and the total expenditure is Rs. 24,94,000 against

Rs. 24,73,000 passed by the Local Government.

24. Stationery and Printing.—The value of "Stationery supplied from Central Stores" in 1889-90 amounts to Rs. 5,07,000 against Rs. 5,30,000 provided for in the estimate of the Government of India. The revised estimate of total expenditure has been reduced from Rs. 10,13,000 to Rs. 9,87,000.

25. Miscellaneous.—The revised estimate now adopted amounts to Rs. 2,73,000 against Rs. 2,19,000 passed both by the Government of India and the Local Government. The increase has been under the heads of "Subscriptions to periodicals," "Donations for charitable purposes," and "Miscellaneous and unforeseen charges."

26. Famine Relief.—A lump grant of Rs. 3,75,000 was provided in the estimate under this head. The adjustment of charges between Provincial and Local Funds, which has been reported to Government, shows a debit of only Rs. 1,40,000 to Provincial, and this figure has been provisionally adopted as

the approximate expenditure on this account.

27. Construction of Railways.—It was anticipated, when both the budget and the revised estimates were passed, that a net credit for Rs. 2,000 would be given to the Capital account of the Kawnia and Dharla State Railway, but the debits to "Capital" on account of the coal purchased for this section more than absorbed the credits arising out of the issue of stores to "Revenue."

28. Irrigation—Major Works.—The "Working expenses" of these works amounts only to Rs. 13,56,000 against Rs. 14,36,500, which was provided in

the departmental estimate.

29. Minor works.—The latest information shows that the grant provided for expenditure on Capital account of the Orissa Coast Canal and the grant for Agricultural works could not be fully utilized within the year. The total expenditure amounts only to Rs. 14,19,000 against Rs. 16,96,000, the estimate passed by the Government of India.

30. Civil works.—The expenditure in charge of the Public Works Department shows an increase of Rs. 1,46,000 over the final grant, which is mainly due to the adjustment of the value of iron girders supplied by the Port Store-keeper, Calcutta, for the Mahanuddy bridge, to the Darjeeling hill cart road,

and to roads in the Chota Nagpore Division.

31. Contributions.—The revised estimate of contributions in aid of Incorporated Local Funds for the year was Rs. 8,00,000, but the total amount drawn amounts to Rs. 11,83,000. The increase is mainly due to the payment of arrear contributions to District Funds for 1887-88 and 1888-89. The Accountant-General has been instructed to take steps to prevent the recurrence of such arrears in future, and to see that the fixed annual grants to District Boards are regularly paid at the commencement of the year for which they are due, and not deferred till applications are made for them.

32. Closing balance.—According to the revised estimates now adopted, the closing balance of the past year amounts to Rs. 37,87,000 against Rs. 35,39,000 anticipated by the Government of India when passing the estimate

for the current year.

#### Part III.

#### BUDGET ESTIMATE, 1890-91.

33. The Lieutenant-Governor has already in separate Resolutions reviewed the estimates of receipts and expenditure for the current year under each head of account. Later information, however, has led to a modification of these in some respects. The following table shows the original budget of the Local Government, the figures accepted by the Government of India, and the estimates which the Lieutenant-Governor has finally resolved to adopt:—

To be substituted for pages 2165—2168 the Supplement to the Calcutta Gazette, and 29th October 1890.

RECEIPTS.	Estimate of Govern- ment of Bengal,	Estimate passed by the Government of India.	Estimate now adopted.	Expenditure.	Estimate of Govern ment of Bengal.	Estimate passed by the Government of India.	Estimate now adopted.
1 10 10 10 10 10 10 10 10 10 10 10 10 10	Rs.	Rs.	Rs.	Direct demand on the revenues—	Rs.	Ra.	Rs.
Heads of Revenue  Land Revenue  Salt Stamps LEXISS	97,93,000 -2,16,000 1,06,50,000 25,50,000	98,40,000 -10,78,000 1,00,000 1,05,50,000 25,50,000	98,70,000 -10,99,000 1,30,000 1,05,00,000 42,95,000	1. Refunds and drawbacks 2. Assignments and compensations 3. Land Revenue 5. Salt 6. Stamps 7. Excise 9. Customs 10. Assessed Taxes 11. Forests 12. Registration	1,39,000 1,53,000 36,16,000 66,000 3,69,000 3,15,000 5,50,000 96,000 2,23,000 3,11,000	1,53,000 86,39,000 68,000 3,94,600 1,55,000 3,15,000 5,50,000 98,000 2,30,000	1,30,000 1,53,000 36,38,000 93,000 3,85,000 1,64,000 5,54,000 96,000 2,23,000 3,11,000
Provincial Rates	50,000	42,95,000 50,000 20,25,000	55,000 20,75,000	Total	59,93,000	60,48,000	61,04,000
-Forests		3,85,000 5,75,000	3,78,000 5,75,000	13. Interest on Ordinary Debt	1,22,69	1,08,000	1,08,000
Total .	3,01,57,000	2,93,92,000	2,93,79,000	Post-office, Telegraph, and Mint- 16. Telegraphs	1,00	1,000	1,000
-Interest	1,59,000	1,59,000	1,44,000	Salaries and expenses of Civil Department— 18. General Administration	15,66,000	15,63,000	15,82,00
see, Telegraph, and Mint-		Water Control		19. Law and Justice— Courts of Law	82,63,000 18,92,000		82.41,00 20,70,00
Telegraphs	1,000	1,000	1,000	20. Police	51,79,00 8,86,00 24,67,00 15,11,00	8,86,000 8,86,000 24,67,000 15,11,000 20,000	52,80,00 9,25,00 24,61,00 15,34,00 20,00
Law and Justice—			1	26. Scientific and other Minor Departme	0.00.00.00		2,98,00
Courts of Law Jails	8,76,000 5,69,000 1,40,000	7,84,000 8,37,000 4,34,000 8,76,000 5,69,000 1,40,900 1,41,000	8,00,000 10,12,000 4,34,000 8,40,000 5,60,000 1,46,000 1,41,000	Miscellaneous —  29. Superannuation, &c  30. Stationery and printing  32. Miscellaneous  Total	2,20,82,00 14,47,00 10,31,00 2,48,00 27,24,00	14,47,000 10,81,000 2,46,000	2,24,11,00 14,70,00 10,31,00 2,51,00 27,52,00
Total .	37,76,000	37,81,000	39,42,000	Famine Relief and Insurance— 33. Famine Relief	1,00,00	1,00,000	1,00,00
neous—  -Receipts in aid of Superannuation -Stationery and PrintingMiscellaneous  Total	7,71,000	56,000 1,65,000 7,71,000 9,92,000	1,31,000 1,65,000 7,71,000 10,67,000	37. Construction of Railways  Railways (Revenue account)—  38. State Railways—  Working expenses { Eastern Ben State Railways—	IV.	33,60,000	25,00
				Interest on debt 40. Subsidized Companies, Land, &c 41. Miscellaneous Railway expenditure	28,14,000 35,48,000 5,000	35,75,000 5,000	28,20,00 35,75,00 16,00 69,00
-State Railways (gross earnings) — Easiern Bengal State Railway Other Railways		63,60,000 63,41,000	63,60,000 63,41,000	Irrigation—	97,95,000	98,29,000	98,40,000
Total	1,24,11,000	1,27,01,000	1,27,01,0+0	42. Major Works — Working expenses	14,19,000 23,94,000	14,19,000 23,87,000	14,19,000 23,87,000
Major Works (direct receipts)	A SECTION OF THE PARTY OF THE P	14,50,000	14,50,000	43. Minor Works and Navigation— By Public Works Department ,, Civil Department	17,33,000	17,33,000 2,000	17,53,000 2,000
By Public Works Department		8,32,000 1,02,000	8,00,000 1,02,000	Total	55,48,090	55,41,000	55,61,000
Total	23,84,000	23,84,000	23,52,000	Buildings and Roads-		-	
and Roads—					28,97,000	28,97,000 88,000	34,20,000 94,000
By Public Works Department	1,50,000	1,50,000	1,50,000	Total	29,87,000	29,85,000	35,14,000
" Civil Department	0.00.000	2,29,000	2,29,000		8,80,000	8,30,000	8,30,000
Total	3,79,000	3,79,000	3,79,000	Total	5,02,07,000	5,02,89,000	5,12,46,000
Total		4.07.50.000	4.90 45 000	Garage Bours	20.32,000	5,33,28,000	5,37,52,000
Total	5,02,59,000	4,97,89,000	5.37.52.000	Description of the deficit	1.50.000	- 5,00,000	-12,81,000
GRAND TOTAL	5,22,39,000	5,33,28,000	5,37,52,000	Maria de la companya del companya de la companya de la companya del companya de la companya de l	+62,000	1 3,500	,04,00

34. Land Revenue.—The total collections in 1889-90 amount to Rs. 3,89,05,000, and the estimate for 1890-91 has been placed at Rs. 3,82,79,000. The collections in the first five months of the current year amounted to Rs. 74,72,000 against Rs. 77,50,000 obtained in the corresponding period of last year. These figures do not justify any change in the estimate of total collections, but the Provincial assets from the 10 per cent. on collections on Government estates, which were estimated at Rs. 3,60,000, with reference to the actuals of 1888-89, amounting to Rs. 3,26,000, amounted to Rs. 4,14,000 in 1889-90,

and as the receipts in the first four months of the current year show an increase of Rs. 13,000 over those of the corresponding period of last year, there is no reason why the estimate should be placed at a lower figure than four lakhs. The estimate on this account has accordingly been raised to Rs. 4,00,000. The Provincial share of the total revenue will therefore be one-fourth of (3,82,79,000—4,00,000)+4,00,000, or Rs. 98,70,000. The adjustments between Imperial and Provincial will probably result in a net debit of Rs. 10,99,000 against Provincial as shown below:—

	Annual estimate of the Government of Bengal.	Estimate of the Government of India.	Estimate now adopted.
and the state of the state of the state of	Rs.	Rs.	Rs.
Fixed contribution to Imperial	-6,90,000	6,90,000	-6,90,000
Special benevolence to Imperial	*****	-10,00,000	-10,00,000
Hidgellee Tidal Canal	+2,10,000	+2,10,000	+2,10,000
Interest on exchange, Railways	+93,000	+93,000	+93,000
Inter-provincial adjustments	-82,000	+30,000	+30,000
Adjustment for Shajehanpore rum	+17,000	+24,000	+24,000
Half the cost of the Special Branch			
of the Police Office	+5,000	+5,000	+5,000
Adjustment for ganja exported	-44,000	-25,000	-25,000
Custom House Appraisers	+8,000	+8,000	+8,000
Conservation of ancient monu-			
ments	+1,000	+1,000	+1,000
Petroleum wharf establishment			7 2,000
at Budge-Budge	+4,000	+4,000	+4,000
Ti t De les Police	+41,000	+41,000	+41,000
Balifical charges	+21,000	+21,000	+ 21,000
Political charges Calcutta Police	+2,00,000	+2,00,000	+2,00,000
	-3,000	-3,000	-3,000
Forest survey charges  New method of testing distilla-	-0,000	-0,000	-0,000
	+3,000	+ 3 000	1 9 000
tion of imported spirits	+ 0,000	+3,000	+3,000
Adjustment on account of the new		CALL CALCE OF	TOTAL MARKET
classification of rewards out of			3 10
criminal fines in excise and			00.000
stamp cases			-30,000
For the up-keep of the Rhotas	**************************************	The state of the s	9,000
Total	-2,16,000	-10,78,000	-10,99,000

The difference between the estimate of the Government of India and that now adopted is due to a credit for Rs. 9,000 afforded to Provincial for the up-keep of the *Rhotas*, and to a debit of Rs. 30,000 on account of the rewards paid out of criminal fines in excise and stamp cases being now adjusted departmentally, instead of, as formerly, under the wholly Provincial head of "Law and Justice."

35. Salt.—The receipts under this head during the first four months of the current year amounted to Rs. 43,000 against Rs. 39,000 obtained in the corresponding period of 1889-90. The total receipts in 1889-90 amount to Rs. 1,24,000; and as some further increase is anticipated when the railway siding and other works now under construction in the Sulkeah Salt Golahs have been completed, the estimate for 1890-91 has been raised from Rs. 1,00,000 to Re. 1,20,000

36. Stamps.—The total receipts from stamps amount to Rs. 1,42,38,000 in 1889-90 against Rs. 1,42,00,000, the revised estimate for the year. The details furnished in the district returns show that, while the receipts from the sale of "General stamps," including duties and penalties, increased by Rs. 1,14,000 in the first five months of the current year over those of the corresponding period of last year, the proceeds from the sale of "Courtree stamps" and "Plain paper" diminished by Rs. 2,61,000. The increase under non-judicial stamps and the decrease under court-fee stamps have not been confined to one month, but have been spread over all the months except June, in which the receipts from court-fees were nearly equal in two years. A part of the latter decrease is probably due to the reduction of the rate of copying

fees from 4 annas to 3 annas per folio which has been sanctioned with effect from 1st April 1890, but an allowance of one lakh was made for this in the estimate originally sanctioned. These figures give some cause for anxiety as to the continued expansiveness of this source of revenue, and they certainly tend to show that it will not be safe to adhere to the original estimate of Rs. 1,42,00,000. The estimate under "General stamps" will be raised from Rs. 39,37,000 to Rs. 42,00,000, and that under "Court-fee stamps" reduced from Rs. 1,02,63,000 to Rs. 98,00,000, and the total placed at Rs. 1,40,00,000.

The Provincial share will amount to Rs. 1,05,00,000.

37. Excise.—The estimate of total revenue under this head amounts to Rs. 1,02,00,000. The Comptroller-General's statements show that the actual receipts in 1889-90 amounted to Rs. 1,04,75,000. The results of the recent settlement of excise shops for 1890-91 show a falling off of nearly two lakhs in "License fees" as compared with the last year, but the details furnished in the district returns show that, while the receipts from "License fees" diminished by Rs. 1,77,000 in the first five months of the current year, the receipts under other heads increased by Rs. 1,55,000. In view of these figures, and looking to the falling off of revenue in the Patna Division in particular, the Lieutenant-Governor considers that it will not be safe to place the estimate for the current year at a higher figure than Rs. 1,04,00,000. The Provincial share will be Rs. 26,00,000.

Customs.—The revised estimate of Provincial receipts under this head for 1889-90 now stands at Rs. 55,000. The receipts during the first four months of the current year show an increase of Rs. 2,000, and there is no reason to anticipate any falling off. The estimate will be raised from Rs. 50,000 to

Rs. 55,000.

39. Assessed Taxes.—The Government of India placed both the revised estimate for 1889-90 and the estimate for 1890-91 at Rs. 40,50,000. The receipts in 1889-90 amount to Rs. 41,66,000. The estimate for the current year can safely be raised to Rs. 41,50,000. The Provincial share will stand at Rs. 20,75,000.

40. Forests.—The estimate of total receipts has been reduced by Rs. 14,000,

and a corresponding reduction has been made on the expenditure side.

41. Interest.—The Government of India have accepted the revised estimate of loans and advances for 1889-90 as passed by this Government, but have made a lump deduction of Rs. 6,85,000 from the provision made under the head of "Loans to municipalities and other local bodies" for 1890-91. This deduction will reduce the estimate of Provincial receipts from Interest by Rs. 15,000, and the amount payable to the Imperial Government by Rs. 14,000. The estimate of Provincial receipts will therefore be reduced from Rs. 1,59,000 to Rs. 1,44,000.

42. Law and Justice-Courts of Law .- The total receipts under this head in the first four months of the current year show an increase of Rs. 29,000 over those of the corresponding period of last year. The approximate actuals for 1889-90 were Rs. 8,03,000. The estimate for the current year will be raised

from Rs. 7,84,000 to Rs. 8,00,000.

43. Jails.—The Inspector-General of Jails originally estimated the total receipts for the current year at Rs. 8,32,000, and this was accepted by the Local Government. This estimate has since been raised by Rs. 1,80,000 on account of the anticipated sale proceeds of caster-oil to be supplied to the Eastern Bengal State Railway, a corresponding additional grant being made on the expenditure side for the purchase of seed. The estimate now stands at Rs. 10,12,000.

44. Marine. - The original estimate under this head amounts to Rs. 8,76,000 against Rs. 8,54,000, the latest estimate for 1889-90. The receipts in the first four months of the current year show a decrease of Rs. 11,000 as compared with those of the corresponding period of last year. The Lieutenant-Governor does not consider it safe to take more than Rs. 8,40,000 as the estimate for the

current year.

45. Medical.—The estimate of receipts under this head amounts to Rs. 1,40,000 against Rs. 1,46,000, the revised estimate as it now stands. The receipts from Medical College and School fees in the first four months of the current year show a small increase, and there is no reason to suppose that the total receipts will be less than those of the preceding year. The estimate will accordingly be raised to Rs. 1,46,000.

46. Superannuations.—The Provincial receipts under this head consist chiefly of contributions received from officers employed on foreign service. The original estimate for the current year stands at Rs. 56,000 against Rs. 45,000, the latest estimate for 1889-90. The increased provision is due to the anticipated increase in receipts, with reference to the Government order directing that contributions shall be levied on the salaries of employés of Municipalities and District Boards whose services have been declared to be qualifying for pension. The estimate will now be further raised by a sum of Rs. 75,000 on account of arrear contributions to be recovered from the salaries of employés under Road Cess and Educational officers transferred to the District Boards.

47. Railways.—The estimates of State Railways as passed by the Government of India have been compared below with the latest estimates for 1889-90 and those originally adopted by this Government for the current year:—

		Estimate	, 1690-91.	Latest estimate,
		Bengal.	India.	1889-90.
RECEIPTS—				
		Rs.	Rs.	Rs.
Eastern Bengal Other branches Tirhoot Nalhati	<del></del>	72,00,000 38,00,000 21,50,000 1,01,000	75,10,000 39,90,000 22,50,000 1,01,000	72,70,000 41,87,000 21,12,000 1,04,000
Total		1,32,51,000	1,38,51,000	1,36,73,000
Expenditure—				
Eastern Bengal		33,60,000	33,60,000	31,01,000
Other branches Tirhoot	•••	17,40,000	17,40,000	20,02,000
Nalhati		9,94,000	10,00,000 80,000	9,06,000 76,000
Total		61,74,000	61,80,000	60,85,000
NET RECEIPTS—				
Eastern Bengal		38,40,000	41,50,000	41,69,000
Other branches	•••	20,60,000	22,50,000	21,85,000
Tirhoot Nalhati	***	11,56,000	12,50,000	12,06,000
Naman		21,000	21,000	28,000
Deduct excess of receipts of the ern Bengal Rai over the contrac	East- ilway	70,77,000	76,71,000	75,88,000
signment of 30		8,40,000	11,50,000	11,69,000
Total Provinci	al	62,37,000	65,21,000	64,19,000

The latest returns from the Examiner of Accounts show that the receipts of the Eastern Bengal System during the first five months of the current year were more than 2 lakhs in excess of those during the corresponding period of the past year. But against this increase must be taken into account the falling off of revenue owing to the interruption of traffic, though temporary, occasioned by the floods on both the Northern Bengal and Eastern Bengal State Railways. The decrease in the first week of September amounted to about Rs. 56,000. The management of the Tirhoot State Railway has been made over to the Bengal and North-Western Railway Company under an agreement from the 1st July 1890,

and there is no later information to justify any alteration of the estimate passed by the Government of India. This estimate of net receipts amounting to Rs. 65,21,000, showing an increase of Rs. 1,02,000 over the latest estimate

for 1889-90, will be retained.

48. Irrigation—Major Works.—The revised estimate under this head for 1889-90 was originally placed at Rs. 14,44,000, and the estimate for the current year at Rs. 14,50,000. The total receipts in 1889-90 amount to Rs. 15,21,000, but the collections in the first three months of the current year were Rs 2,22,000 against Rs. 2,92,000 realized in the same period of 1889-90. In view of the fluctuating character of these receipts, the Lieutenant-Governor does not consider it safe to alter the estimate passed by the Government of India.

49. Minor Works and Navigation.—The returns from the Examiner of Public Works Accounts show that the receipts in the first three months of the current year amounted to Rs. 1,37,000 against Rs. 1,33,000 realized in the corresponding period of last year. The total receipts in 1889-90 amounted to Rs. 7,89,000. It will not be safe to place the estimate for the current year at a higher figure than Rs. 8,00,000. The estimate will accordingly be

reduced by Rs. 32,000.

#### EXPENDITURE.

50. Land Revenue. - The Government of India have raised the original estimate of total expenditure under this head by Rs. 23,000 to accord with the estimates of the Surveyor-General passed by that Government in the Finance and Commerce Department Resolution No. 736, dated 12th February 1890. The estimate will further be increased by Rs. 2,000 for the purchase of an elephant for the Chittagong Division, for which no provision was made in the budget. The estimate of total expenditure, which would thus have risen from Rs. 36,16,000 to Rs. 36,41,000, will be reduced by Rs. 3,000, the amount transferred to the Public Works Department, Irrigation Branch, for the maintenance of the Kutubdia embankments in the Chittagong Division. The estimate will then stand at Rs. 36,38,000.

51. Salt.—The original estimate under this head, amounting to Rs. 30,000. was raised by Rs. 36,000 for the construction of pontoons on the river frontage of the Sulkea Salt Golahs, and of a shunting line directly connecting the golahs with the East Indian Railway. Since then a regrant of Rs. 51,425 for the purchase of Kilby's scales has been sanctioned, and an additional grant of Rs. 2,861 has been made for the completion of the sidings. The charge for pontoons, amounting to Rs. 28,210, has since been transferred to the Public Works Department.

The estimate has provisionally been placed at Rs. 93,000.

52. Stamps.—The Government of India have raised the Provincial expenditure under this head by Rs. 25,000, chiefly under "Stamp paper supplied from Central Stores," to accord with the figures adopted in the India estimates. It has recently been decided that the rewards for the prevention or detection of offences against the laws of the Excise and Stamp Departments should be debited to "Excise" and "Stamps" respectively, and not to "Law and Justice." The new classification has come into force from the 1st April 1889, and to meet the additional liability thrown on the Imperial revenues by the change, Rs. 28,859 and Rs. 30,000 have been deducted from the Provincial share of Land Revenue for 1889-90 and 1890-91 respectively. The rewards in stamp cases are, however, comparatively few, and a grant of Rs. 1,000 will probably be sufficient for the purpose. On the other hand, it is probable that there will be some reduction under discount of stamps. On the whole, the Lieutenant-Governor considers that a grant of Rs. 3,85,000 on Provincial account against Rs. 3,83,000, the latest estimate for 1889-90, will suffice, and this figure has accordingly been now adopted.

53. Excise.—The original estimate under this head, amounting to Rs. 5,79,000, was subsequently raised by Rs. 40,000 to meet the cost of the construction of new distillery buildings required for the introduction of the central distillery system throughout the whole of the Presidency, Burdwan, Dacca, and Orissa Divisions. A provision of Rs. 39,000 has also been added under the head for rewards in excise cases, a corresponding reduction being made under "Law and Justice." The total estimate will therefore stand at Rs. 6,58,000, and the Provincial share at Rs. 1,64,000.

54. Provincial rates.—The estimate for the current year is thus compared with the latest estimate for 1889-90:—

and the second second		Latest estimate, 1889-90.	Estimate, 1890-91.
Public Works Cess establishment Road Cess establishment	Agella HE GAN	Rs. 25,000 3,12,000	Rs. 48,000 2,67,000
Total		3,37,000	3,15,000

In view of the approximate actuals for 1889-90, the estimate under the head of Road Cess establishment has been raised to Rs. 3,00,000, and the total placed at Rs. 3,48,000.

55. Customs.—The estimate under this head will be raised by Rs. 4,181, to provide for the cost of the establishment and contingencies required by the Collector of Customs, Calcutta, for the purpose of working Kilby's patent scales for the weighment of salt in the Port of Calcutta. It will now stand at Rs. 5,54,000.

56. Forests.—The Government of India have raised the estimate of expenditure under this head by Rs. 14,000, to provide for the forest survey charges. Against this increase there has been a reduction of a like amount as explained in paragraph 40 above. The Provincial share of the estimate amounts to Rs. 2,23,000.

57. Interest on Ordinary Debt.—As explained in paragraph 41, the estimate of expenditure will be reduced from Rs. 1,22,000 to Rs. 1,08,000, as passed by the Government of India.

58. General Administration.—The estimate of the Local Government includes a provision of Rs. 3,000 for the cost of two elephants for the Superintendent of the Tributary Mehals, Orissa. The Secretary of State has recently sanctioned the appointment of an Additional Commissioner for the Patna Division for nine months on Rs. 2,500 per mensem, and a provision of Rs. 16,000 has been made for this purpose. The estimate will therefore stand at Rs. 15,82,000.

59. Law and Justice—Courts of Law.—The estimate under this head will be raised by Rs. 18,000 to provide for the salary of six additional Munsifs sanctioned since the estimate was passed. Against this increase the estimate will be reduced by Rs. 40,000, being the amount transferred to "Stamps" and "Excise" on account of rewards for the prevention and detection of offences against the laws of the Stamps and Excise Departments. The total estimate will stand at Rs. 82,41,000.

60. Jails.—The difference of Rs. 3,000 between the original estimates of this Government and the Government of India is under the sub-head "Clothing and Bedding" under District Jails. The estimate has further been increased by Rs. 1,80,000, to provide for the purchase of castor-seed. Against this increase a sum of Rs. 2,124 has been deducted and made over to the Public Works Department for the construction of Jailors' quarters at Rungpore. The grant now stands at Rs. 20,70,000.

61. Police.—The Government of India have raised the estimate of this Government by Rs. 22,000. The reductions approved in the Resolution of the Home Department, No. 742, dated the 28th October 1889, have not been entirely carried out. The approximate actuals for 1889-90 were Rs. 52,99,000, and the actuals of the first four months of the current year do not show any falling off in expenditure as compared with those of the corresponding period of last year. In view of these figures, the Lieutenant-Governor does not consider it safe to place the estimate for the current year at a lower figure than Rs. 52,80,000.

62. Marine.—The original estimate under this head, amounting to Rs. 8,86,000, includes a provision of Rs. 10,000 for grant to the Balasore Port Fund. As grants of Rs. 20,000 have been sanctioned to each of the "Balasore" and "Cuttack and Pooree" Port Funds, the estimate will be raised by Rs. 30,000. It will be further increased by Rs. 9,000 to provide for the up keep of the Rhotas, which has now been transferred to Provincial with an assignment of a like amount. The grant will stand at Rs. 9,25,000.

63. Education. - The estimate under this head has been reduced by Rs. 6,278, and a grant of a corresponding amount has been made to the Public Works Department for additions and alterations to the Gya Zillah School building. The

grant now stands at Rs. 24,61,000.

64. Medical.—The expenditure under this head for 1890-91 has been estimated at Rs. 15,11,000 against Rs. 15,27,000, the latest estimate for 1889-90. The charges under Medical establishment show however no Reduction and the estimate will, therefore, be raised to Rs. 15,27,000. The estimate does not include any provision for the salary of the Sanitary Engineer and the establishment and other contingent charges of the Sanitary Board now formed under the orders of the Government of India. An Engineer has been appointed with a salary of Rs. 700 and an allowance of Rs. 100 per mensem and a small establishment, costing Rs. 39 per mensem, has been sanctioned. A provision of Rs. 7,000 will be made on this account. The total grant will stand at Rs. 15,34,000.

65. Superannuations.—The Provincial expenditure under this head in past

years has been as follows:-

					Increase.	
				Rs.	Rs.	
1884-85		William A.		11,99,000		
1885-86				12,39,000	40,000	
1886-87				12,68,000	29,000	
1887-88	1		***	12,80,000	12,000	
1888-89	AND THE PARTY OF			13,70,000	90,000	
1889-90	STATE OF		1 77	14,36,000	66,000	
Estimate, 1890-91	be in all we	with the same		14,47,000	11,000	
	11517	Carlo Barriera de la Carlo de	Section Section	November 1985		

The increase in the last five years amounted to Rs. 2,37,000, or an average of Rs. 47,000 a year. The actuals of the first four months of the current year show an increase of about Rs. 13,000 as compared with the corresponding period of last year. In view of these figures, it will not, be safe to place the estimate

for the current year at a lower figure than Rs. 14,70,000.

66. Miscellaneous.—The estimate of Rs. 2,46,000 under this head has been raised to Rs. 2,51,000 to provide for an increased grant of Rs. 3,600 to the St. Mary's House of Charity Building Fund, and for the regrant of Rs. 1,352, being the unexpended balance of the Government grant on account of the passage-money of Clewer sisters, to the Honorary Secretary, Lady Canning Memorial Fund.

67. Railways-Subsidized companies, land, &c. The original estimate of Rs. 5,000 under this head represents the capitalized value of the abatement of Government revenue to be credited to Government and debited to the Provincial revenues under the head "Tarkessur Railway." The estimate does not provide for the cost of land required for the construction of a metre-gauge railway from Julpigoree to the tea districts in the Western Dooars and for establishment required for the demarcation of land. It has been decided to meet the charge from Provincial revenues, and the Board of Revenue have been asked for a rough estimate of the cost of land. In the meantime a provision of Rs. 11,000 will be made on this account.

68. Minor Works and Navigation .- The estimate of the Government of India, amounting to Rs. 17,33,000, will be raised by Rs. 16,921, the amount added to the grant for expenditure by the Collector of Gya on irrigation in Government estates, and by Rs. 3,000 for the adjustment of expenditure on Kutubdia embankments in the Chittagong Divisior under this head. The total

grant thus stands at Rs. 17,53,000.

69. Civil Works by Public Works Department.—The grant under this head was originally fixed at Rs. 28,97,000. This has subsequently been raised to Rs. 30,20,000 by the following additions and deductions:—

the same of the time that the state of the same of the same of	Rs.	Rs.
As originally fixed	344-1-04	28,97,000
Add-	THE VICTORY	
Grant for the telegraph office at Budge-Budge Grant for the construction of pontoons (Rs. 28,210), crane and other works (Rs. 3,750) in the	17,478	nalization edicated
Sulkea Salt Golahs	31,960	
Grant for additions and alterations to the Gya Zillah School building Grant for the construction of a metalled road from	6,278	danakan Perangan
Matigurah to Nuxulbari Grant for the construction of Jailors' quarters in the	60,000	
Rungpore Jail	2,124	
Grant for the repairs of the river bank in proximity to the Nawab's Palace at Moorshedahad Grant for the repairs of the roads from Buxa and	25,000	
Santrabari to Chunabatti	3,000	en McMalla (2) Inc.
The state of the s	Transfel	1,45,840
		30,42,840
Deduot—		
Grant to the District Board of Gya Durbhunga Municipality	20,000 2,426	
" Durbhanga Municipanty	2,450	22,426
		30,20,414
Or in round numbers		30,20,000
	THE STATE OF	- Power

A further grant of four lakhs will now be made to enable the Public Works Department to undertake urgent works, and especially to defray the cost of repairs and maintenance of the roads in the Darjeeling district where considerable damage has been done by the recent rains. The total grant will now

stand at Rs. 34,20,000.

70. Civil Works by Civil Department.—The estimate under this head was originally passed for Rs. 88,000. The estimate has since been raised by Rs. 2,000 to meet the Government contribution to the Mahomedan Burial Board. It will further be raised by (2,426+1,653=) Rs. 4,079 for grants already sanctioned to the Durbhunga and the Calcutta Municipalities for the maintenance of certain roads formerly under the control of the Public Works Department and the 24-Pergunnahs District Board respectively. The total grant thus stands at Rs. 94,000.

71. Contributions.—The original estimate of Rs. 8,30,000 for grants-in-aid

of District and other Incorporated Local Funds will be retained.

72. Closing balance.—According to the estimate originally passed by this Government, it was expected that the year would close with a credit balance of Rs. 20,32,000. According to the estimates now adopted, the closing balance will be Rs. 25,06,000. The improvement in the resources of the Local Government is chiefly caused by the increase under the head of Railway receipts. When the estimates were submitted to the Government of India by the Financial Department in March last, the figures of the Public Works Department, which were available at the time, showed Rs. 1,22,89,000 and Rs. 1,24,11,000 as the estimated gross receipts for 1889-90 and 1890-91 respectively. A more favourable forecast, based on later information, was submitted to the Government of India direct by that Department, and the estimates, as now finally adopted, amount to Rs. 1,25,04,000 and Rs. 1,27,01,000. The net increase in the two years amounts to Rs. 5,05,000.

Ordered that a copy of this Resolution be submitted to the Government of India, Department of Finance and Commerce, for information.

Ordered also that a copy of the above Resolution be forwarded to the Board of Revenue; to all Commissioners of Divisions; to the Inspectors-General of Civil Hospitals, Police, Jails, and Registration; to the Directors of Public Instruction and Land Records and Agriculture; to the Conservator of Forests; to the Port Officer, Calcutta; to the Superintendents of Botanical Gardens and Government Printing, Bengal, and to all Departments of this Government, for information.

Ordered also that a copy of the above Resolution be forwarded to the Accountant-General, Bengal, for information, with special reference to para-

graph 31.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON, Secretary to the Govt. of Bengal.

# RESOLUTION ON THE REPORT ON PUBLIC INSTRUCTION IN BENGAL FOR THE YEAR-1889-90.

# GENERAL DEPARTMENT-EDUCATION.

Darjeeling, the 20th October, 1890.

RESOLUTION.

READ-

The Report on Public Instruction in Bengal for the year 1889-90.

The Education Department was in the charge of Sir A. Croft, K.C.I.E., during the year, except for the period of three months in which Mr. C. H. Tawney, c.i.e., acted for him and submitted the annual report for 1888-89. The greater length of the report now submitted than that of last year is in accordance with the wishes of Government that details should be fully examined only in alternate years. But the account furnished of the year's operations is no less interesting than any of the series which for some years past Sir A. Croft and Mr. Tawney have added to the records of the Education Department and of Government. These reports are always highly creditable to the Department of Public Instruction in Bengal. The Lieutenant-Governor has much pleasure in noticing that the present report has been laid before Government by the prescribed date.

2. The total number of pupils under instruction in the educational institutions of all classes only rose by 9,773 in comparison with the previous year. This increase was secured Number under instruction. among private as distinguished from public institutions; the latter on the whole showed some decline. The falling off in the number of college students was slight, and, generally speaking, the figures betoken the same eagerness as has been previously noticed on the part of the upper and middle classes of the community to avail themselves of the advantages of education. The chief factor in the decrease of public institutions is to be found in the loss of aided lower primary schools, whereas the gain in the number of private institutions is partly attributable to the discovery of 1,750 elementary Koran schools hitherto unrecorded in the Dacca and Chittagong Divisions, and partly to an increase of elementary indigenous schools. Too much importance must not be attached to the fluctuations in the numbers of the lower primary schools. The indigenous schools of Chittagong, for instance, present endless difficulties in the way of accurate classification, so that primaries disappear only to be counted in another category as Koran schools. The tenure of the lowest fringe, or, to use another metaphor, of the outer circle of these primaries is described as thoroughly precarious and unstable. Hundreds, or even thousands, of these are set up, carry on feebly and intermittently for a period, and then disappear, leaving no trace. The Director has opportunely raised the question whether the country or the cause of education derives any advantage from the expenditure of money on such ephemeral schools, which make no appreciable impression on the ignorance of the rural population. The anxiety of Government to extend elementary education has been constantly declared and is an established principle of the educational policy; but a mere superficial extension, with a view to show larger numbers on the list of pupils, without requiring any depth or conformity with the existing standard, does not commend itself to the Lieutenant-Governor. The money available for primary education is necessarily limited in amount, and it is essential, in the interests of economy and of the really useful schools, that the allotment should be spent with discrimination. Under present circumstances, therefore, while the primary grant

remains inexpansive, the consolidation, rather than an unlimited extension, of the primary system appears to be advisable, and the Director's recommendation is therefore accepted that, for the present, admission to the reward examination should be limited to schools that satisfy certain conditions as to number and progress of pupils as determined by inspection in situ, and that no school so admitted should be entitled to any reward unless it earns at the examination a certain minimum sum. The progress of education cannot be gauged by the test of numbers alone, on which the changes in the schools of the lowest grade have an effect so disproportionate to their real importance. The increase of 26,909 schools and 672,893 pupils in 10 years undoubtedly represents a real

advance in the demand for education.

3. The expenditure as verified by the Accountant-General's figures has again exceeded the sanctioned estimate. The excess Financial results. of Rs. 51,182 has, however, been balanced to a great extent by a surplus of Rs. 33,506 over the estimated receipts. After allowing for certain charges to be debited to the Public Works Department, the net deficit is only Rs. 6,295. The explanation offered by the Director deserves consideration. His budget, it appears, was reduced by the Accountant-General by the large sum of Rs. 1,64,000 on account of probable savings, after examination of the actuals of the preceding year, and he was then required to retrench Rs. 30,000 more to assist the financial necessities of Government. The result shows that, when the effect of the probable savings has been thus discounted, it is practically almost impossible for the reduced estimates to bear further curtailment. The Lieutenant-Governor recognises the loyalty with which the Director and the Department have endeavoured to meet the views of Government, and he trusts that vigilance and care may be constantly exercised in keeping down expenditure and in realizing the best possible value for the cost incurred. The total sum spent in Bengal on education of all descriptions, from the highest to the lowest, amounted to Rs. 87,43,000, an increase of Rs. 75,000 over the preceding year. The contribution from public sources declined from Rs. 32,44,000 to Rs. 32,37,000, while private expenditure rose from Rs. 54,24,000 to Rs. 55,06,000. Collegiate, secondary, primary, female, and special education were all more costly than in the previous year, whereas comparative economy was exercised in the item of buildings to the sum of a lakh and a half of rupees. The municipal contributions stand at exactly the same sum, Rs. 83,000, as last year; the Lieutenant-Governor would be glad to hear of their being increased. Steps have been taken to make the figures furnished by the municipalities to the Department correspond with those supplied by them to Government. There are difficulties in the way, it is admitted, but the matter should continue to receive attention.

4. The educational functions delegated to the District Boards constituted under Act III (B.C.) of 1885 include the management of Government primary and middle schools, the distribution of the grant-in-aid allot-ment for middle schools under private management, the administration of the primary grant, the conduct of the annual examinations of primary schools for rewards and the award of lower primary scholarships. The Boards are also

rewards, and the award of lower primary scholarships. The Boards are also authorized to establish and maintain, with the sanction of Government, schools of technical instruction, and some have already taken up this question with interest and energy. The Technical Institute, for example, established by the District Board of Rungpore, has attained considerable success. With the object of defining more clearly the functions of the Boards and their relations to the officers of the Department, revised educational rules under the Act were under consideration and public criticism during 1889-90, and finally promulgated by Government on the 18th April last. Experience has already shown the new rules to be greatly superior to the old. They give somewhat larger powers to the District Boards than they had previously enjoyed, while any departure from the existing system, in regard to the administration of funds or the control of schools, is made conditional on the sanction of Government. The power of the Inspector and his position as a controlling officer are more clearly defined. In accordance with the views of Government, Deputy Inspectors of Schools have in nearly every district been appointed ex-officio members, not only of the District Boards, but also of the Education Committees to which these bodies have generally delegated their ordinary executive duties. The advantages of this plan are already apparent, co-operation and efficiency having often taken the place of friction and mismanagement. The Lieutenant-Governor has again the pleasure of observing that the relations between the Boards and the Deputy Inspectors in the majority of districts are eminently satisfactory. Government must look to the good offices of the authorities in the Burdwan and Orissa Divisions, in which differences have arisen, to put things straight as soon as possible. On the other hand, there are indications that in some places the education work of the District Boards has been allowed to lapse too much into the hands of the Chairman or Vice-Chairman in his executive capacity. While the Lieutenant-Governor allows that there is some force in the excuse that it is ordinarily not easy to arouse any enthusiasm for educational work, except

on such occasions as present opportunities for the exercise of patronage, he desires that the District Boards, through their Education Committees, may be fully consulted in all matters of principle and importance, and that their functions may not be over-ridden by the executive officers. The Director has, in a very proper spirit, as a friendly critic, drawn attention to some shortcomings in the work of certain District Boards. It is through no fault on their part that their educational operations have in some cases been hampered for want of funds, the income from ferries and pounds not having kept pace with their educational requirements. But they must be held responsible for such matters as great delay in the despatch of business, especially in disposing of reward bills and in making up examination results, irregularities in the method of accounting for public money, misapplication of the primary grant, or failure to spend fully the allotments for primary education. These are matters which the District the allotments for primary education. Boards are quite capable of correcting for themselves. It is not a matter for surprise that their control and management of middle schools of various classes is less efficient than when the work was performed by high officers of the Education Department. Sir Alfred Croft rightly observes that this decline in efficiency is part of the necessary price paid for Local Self-Government. The policy of entrusting District Boards with certain educational work, in which the Department has given them its steady support, has been deliberately adopted for reasons which have often been stated, and improvement can only be obtained by perseverance. The transfer of large educational powers to Local, as distinguished from District, Boards appears to have been prematurely attempted in some places.

5. The Circle Inspectors have all done a large amount of inspection duty. Among the Deputy Inspectors it is noticeable that the average number of days spent on tour varies from 118 in Orissa and 131 in the Chittagong Division to 198 in the Bhagulpore and 203 in the Patna Division. It is not explained why there should be such marked differences between one division and another, and the Director has taken proper notice of the unsatisfactory explanations offered by the three Deputy Inspectors in Orissa for their deficiencies in touring. A change in the system of reckoning the duration of tours makes any comparison with the previous year difficult. During the year the heading "days on tour" in the tabular statement of inspections has been changed to "days on tour outside head-quarters," and it has been ordered that all work done by an officer who returned the same night to his house without overpassing the five-mile limit should be reckoned as headquarters work. The object of this change has been to frustrate the designs of some officers whose returns of inspection, showing a numerically high average of work, had been secured by the easy device of visiting schools at and near headquarters with unnecessary frequency. The Lieutenant-Governor entirely concurs with Sir A. Croft that it is the duty of Deputy Inspectors to spend at least 150 days on actual tours within their districts, and that there is no reason why head-quarters schools should be neglected in consequence of the new rule. He will be requested to bring to the notice of Government any cases of its abuse. The inadequacy of the clerical assistance afforded to the Deputy Inspectors is a serious matter. The increased office work thrown on them since the creation of District and Local Boards, and the correspondence that will be entailed by the working of the transfer rules for primary and middle schools, are calculated to diminish their activity as inspecting officers if proper help is not allowed them. This matter has been represented to Government, but, owing to financial considerations, it has been hitherto impossible to apply a remedy. The Director will be desired to resubmit the case. The Sub-Inspectors have for the most part complied with the prescribed minimum of inspection duty, viz. 200 days and 400 schools. But the opinion of superior officers inclines to the view that there is some falling off in efficiency in their work, and that the control formerly exercised by the Department was firmer than that of the District Boards to which the Sub-Inspectors have been transferred. The anomalous position occupied by these officers may partly account for this: they have become the servants of the Boards for their work and their pay, while they are still eligible for promotion to and in the subordinate graded service; they are not under the direct control of the Deputy Inspector, but must necessarily depend largely upon his good opinion and endeavour to work up to his views.

Collegiate institutions, of which four have sprung into existence in 1889-90. There are now 38 in all, namely, Government 11, municipal 1, aided 8, unaided 18. The increasing demand for such education, and the development of private enterprise, are gratifying. Sir A. Croft strikes the right note when he says that the policy of the day clearly tends more and more towards the concentration of higher educational effort in the Presidency College and the gradual retirement of Government from the outlying colleges, where private enterprise may in time be trusted to take up the work. The number of collegiate students has fallen (for the first time since 1886) from 5,184 to 4,882, the result, it is evident, of fewer passed candidates at the Entrance Examination of 1889 being available to supply the places of those who had left the colleges after taking their degrees or otherwise. The number of successful candidates at the University Examinations again increased, and have for the last three years been as follows:—

	1447.430.00	The second second	1888.	1889.	1890.
First Aits	Water to deliver the	SELECTION OF THE PERSON OF THE	481	629	996
Bachelors of Arts	Mary A. Mary		323	366	399
Masters of Arts	9.7100	Berry College	43	58	62

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The increasing number of Mahomedan candidates is noteworthy, viz. 57 in First Arts as against 21 and 19, 21 in the B.A. against 18 and 12, and 3 Masters of Arts against 1 and 1 in the two preceding years. The percentage of success achieved by the Government colleges was well maintained. The total expenditure upon collegiate education has risen during the year from Rs. 6,38,954 to Rs. 6,91,079, of which Government contributes a fraction over 40 per cent. In the Government colleges the total cost has also risen from Rs. 3,83,365 to Rs. 4,09,955, and the cost to provincial revenues from Rs. 2,30,409 to Rs. 2,52,465. The annual cost of each student in a Government college increased from Rs. 233 to Rs. 244, and the cost of his education to Government from Rs. 140 to Rs. 150. The increase in the Government expenditure is attributed partly to the absence of fewer officers than usual on furlough and partly to the loss of students and their fees—a loss from which all colleges suffered alike. This is borne out by the following figures relating to the entire body of collegiate students:—

Assessment of the state of the		1888.	1889.	1890.
Average cost of each student in a Bengal		143	124	138
The Government share thereof		63	50	55

The college reports bear testimony to substantial progress, and mention cases of liberality of individual benefactors which merit the acknowledgments of Government.

Though the total number of secondary schools of all classes has risen from 2,319 to 2,366, i.e. by 2 per cent., the number of pupils has only risen from 2,00,124 to 2,01,452, i.e. by 6 per cent. This absence of corresponding increase in the number of pupils betokens an unnecessary multiplication of schools and an unhealthy competition among them for pupils. The high English and the middle English schools are both more numerous and have more pupils. The decrease in the number of middle vernacular schools is confined to schools managed by Municipal or District Boards or aided by those bodies or by Government. All middle schools in extra-urban tracts, whether maintained or aided by the Department, have been transferred to the control of District and Local Boards under the Government rules, in accordance with the Local Self-Government Act. The expenditure on secondary instruction has varied in the last two years as follows:—

	1	No. of schools.	Public funds.	Private funds.	Total.
		100年 中国	Rs.	Rs.	Rs.
1888-89		2,319	6,01,539	19,34,506	25,36,045
1889-90		2,366	6,08,294	20,11,672	26,19,966

The "public funds" include the provincial revenues, district funds, and municipal funds. The Education Commission recommended that a periodically

increasing provision be made in the education budget of each province for the expansion of aided institutions, but financial exigencies and the needs of primary education have prevented compliance with this policy. Not only has it been found impossible to aid the several classes of secondary schools up to the maximum percentage allowed by the grant-in-aid rules, but it becomes necessary to scrutinize every application for a renewal of a grant with a view to possible reduction and perhaps cancellation, so as to have money for new grants and still keep within budget limits. Thus there are still 477 schools, viz. 127 high English, 210 middle English, and 140 middle vernacular, which have not been placed upon the aided list. At the University Entrance Examination 2,156 boys passed in 1890 as compared with 1,153 in 1889, the percentage of success being 50 instead of 24. The schools have profited by experience, greater attention has been paid to their studies by the many unsuccessful candidates of the preceding examination, and school-masters have recognised the necessity of more systematic and careful teaching before a candidate has any chance of passing. The continued success of the Dacca Collegiate School and of the Burrisal and Furreedpore Zillah Schools is praiseworthy. The results of the Middle English and the Middle Vernacular Scholarship Examinations were far worse than in the preceding year. The full enforcement of the rule preventing successful candidates of previous years from again attending the examinations in the hope of winning scholarships affords an insufficient explanation. Sir A. Croft hesitates to ascribe this decline to a failure of efficiency under the management of District Boards, and would rather attribute it to the resumption of the more rigorous standard formerly required.

8. Measures have been adopted during the year for giving effect to the views of the Government of India in regard to Discipline and moral training. discipline in schools and colleges. The summary of these measures given in the Director's report hardly admits of further condensation, but some of the more important steps taken deserve notice. The establishment of a special training college for teachers has been sanctioned and will be carried out as soon as funds are forthcoming. Principals of Government colleges were addressed on the subject of elevating the moral tone of the students, and the Lieutenant-Governor drew attention to the many opportunities which the study of ethics, and other occasions of college life, afforded to Professors for moral instruction of a character such as to influence their pupils and make a permanent impression. The adoption of suitable moral text-books for schools of all classes has been kept in view: and the example set by the University in preparing a book of selections for the Entrance Examination is to be followed so as to meet the requirements not only of the junior classes of high schools, but also of middle and primary schools through the medium of works in the vernacular. The maintenance in every school of conduct registers, with a record of the head-master's opinion of each boy's character and behaviour, based upon personal knowledge, has been insisted upon, and special attention is to be paid to the entries in the conduct registers of candidates for employment in Government offices. The appointment of monitors under proper safeguards has been authorized, and the system is being tried in institutions to which hostels are attached. More recently these monitors or prefects have been entrusted to a limited extent with punitive powers. A rule has been issued with the object of minimising the evil of having in the same class grown up lads and little children. The attention of school authorities has been drawn to the necessity of encouraging outdoor games and exercises, on the understanding that no attempt should be made to create a race of acrobats out of our students. Should physical exercise in other forms not be popular, some form of drill is, under the orders of the Government of India, to be compulsory. The Director adds: "It is believed that schools at the sudder stations will find no difficulty in obtaining a person able, if necessary, to give instruction in drill; but such exercises as parallel bars, dumb-bells, cricket, football and indigenous games, including athletic sports, running, jumping, &c., are more to be commended and more likely to be generally acceptable. It has been explained that no reasonable outlay will be refused for the purpose of setting up gymnastic appliances, or of aiding cricket and football clubs." As to discipline, it is admitted that

the more closely a school is connected with the Department, the better is its discipline, and in most cases it is not so much the absence of morality as of good manners in the boys and the junior teachers that requires to be corrected. Defiance of authority, indifference if not positive disrespect, a rude offhand manner, showing no sign of respect to a superior, are sights too common in many schools. Cases of actual misbehaviour towards teachers are said to be happily rare; but they are entirely absent, and the punishment of rustication for a year or more has had a salutary effect. Cases of grave misconduct on the part of teachers themselves are not wanting: and to some extent the unhealthy state of public opinion in regard to discipline gives rise to troubles in school management. The opening of a new school as a money speculation, near an old and established institution, often has the effect of disorganising school discipline in the locality for a time. Sir A. Croft considers that it is very desirable that certificates should be refused to schools that defy the rules of discipline, or to those that are opened in a mere spirit of opposition and rivalry to other non-Government schools, without any prospect of permanence and to the injury of sound education. The Lieutenant-Governor concurs in these views, and will be prepared to receive definite suggestions on the subject. It is very satisfactory to learn that the operation of the transfer rules has been entirely wholesome, and that the revised rules recently issued are likely to check many irregularities that formerly prevailed. Simple rules for the transfer of pupils in middle and primary schools, in the spirit of those approved by Government for high schools, are being framed. Having regard to these measures, the Lieutenant-Governor is of opinion that a very considerable advance has been made in the direction desired by the Government of India. The policy indicated has had his entire concurrence and support; he has not expected anything but gradual improvement, and he looks to the co-operation of all officers of the Department in the endeavour to reform the whole tone of education in Bengal on the lines laid down by the highest authority.

9. The same features which were noticed in the Resolution on the report for 1888-89 have re-appeared this year in the numerical statistics of primary education. There are more upper primary schools and they have more pupils: but the gain is more than met by the loss in the lower primaries. The net result is a diminution in the number of schools by 449 and of pupils by 12,178, confined to the Presidency, Chittagong, and Orissa Divisions. Excluding payments made to primary schools from the grant-in-aid and circle fund allotments, the expenditure on primary education, controlled by the Department and by District Boards, amounted to Rs. 7,29,851, divided into Rs. 1,46,178 from provincial revenues and Rs. 5,83,673 from district funds. The following statement shows by divisions the administration and expenditure of the primary grant upon aided schools in 1889-90:—

Division.	Allotment.	Expenditure.	Number of schools.	Number of pupils.	Cost per school in ropees.	Cost per pupil in annas.
	Rs.	Rs.				
Presidency	91,440	89,346	4,340	126,493	20.5	11.3
Calcutta	9,000	9,000	201	9,485	44.7	15.1
Burdwan	1,20,124	1,21,144	8,704	218,763	13.9	88
Rajshahye	78,670	70,093	2,571	65,578	27.2	17.1
Dacca	1,00,349	88,884	4,575	113,908	19.4	12.4
Chittagong	71,050	67,304	4,547	98,200	14.8	10-9
Patna	1,02,913	98,947	5,414	118,054	18.2	13.4
Bhagulpore	75,234	69,965	2,540	57,995	27.5	19.3
Ohota Nagpore	54,767	54,937	1,509	45,567	36.3	19.6
Orissa.	60,203	59,157	4,758	73,340	12.4	12.9
Orissa Tributary Mehals	2,800	1,074	67	695	16.03	24.7
Total	7,61,550	7,29,851	39,226	928,078	18.6	12.6

10. There are 242 training schools for teachers, i.e., masters, mistresses, and gurus, with 1,993 persons under instruction. It is satisfactory to find that in general those who pass out of our training schools are sought after as teachers, and seldom find difficulty in obtaining employment. The Director has rightly instructed the Inspector of the Behar Circle to challenge any appointment made by a District Board that he finds open to objection on the ground of a passed pupil of the Patna training school being overlooked for an outsider.

The other class of schools of special instruction includes the institutions for professional, technical, art, and industrial education, and schools of a special character. The statistics relating to their numbers and cost are given in the following form:—

	1	the rolls	ımber.		EXPEND	ITURE.			NNUAL COST
and the second of the second o	tings.	eon th	roll nr	From pub	lie funds.	· ·		ę.	
	Number of institutions	Number of pupils on on 31st March 1880,	Average monthly roll number.	From Provincial revenues.	From District and Municipal funds.	From Private funds.	Total.	Cost to public funds	Total cost.
ILaw.				Rs.	Rs.	Rs.	Rs.	Rs. A. F.	Rs. A, P.
Government Law Schools		118 794	137 726	=	·	8,719 22,186	8,719 22 186	=	63 10 3 30 8 11
Total .	. 10	912	863	-		30,995	30,905	202203	88 18 11
II Medicine.				Ture 21				Mer in	
Calcutta Medical College Government Medical Schools Unaided Medical Schools	4	149 639 228	198 598 235	1,90,851 72,965	=	8,352 17,242 6,911	1,99,203 90,207 5,911	968 14 3 122 0 2	1,006 1 6 150 13 6 25 2 8
Total	. 7	1,016	1,031	2,63,816		31,595	2,95,321	255 14 1	286 7 0
III.—Engineering.	111.52								
Civil Engineering College, Seebpore	1000	265 387	221 392	65,096 -7,497	=	9,837 4,777	74,433 12,274	294 8 9 19 2 0	336 12 9 31 4 11
. Total		652	613	72,593		14,114	86,707	118 6 9	141 7 1
IV.—Mrt and Industry.									
Government School of Art Ditto Industrial Schools Beard Industrial Schools Aided Industrial Schools Unaided ditto	7	178 39 30 382 166	171 37 27 286 134	25,662 1,632 1,465	721 508	3,905 1,683 471 8,792 638	29,567 3,315 1,193 5,765 638	149 15 4 44 1 8 5"1 11	172 14 6 89 9 6 44 3 4 20 3 6 4 0 3
Total	18	705	655	28,769	1,239	10,389	40,377	45 14 6	61 10 3
VOther Schools of Special Instruction.									
Government Schools	7	307 250	284 220	690	609	2,973 936	4,167 4,179 986	99 3 5	99 3 5 7 13 3 4 4 9
Total	15	611	496	4,857	509	3,909	9,275	9 19 8	18-11 3
GRAND TOTAL	54	3,986	3,658	3,70,025	1,738	90,832	4,62,585		

There is no object in striking an average of the cost per pupil at a number of schools so varied in character and status.

The variations in the numbers of students following the different professions will appear from these figures:—

YBARS,	law.	Medicine.	Engineering.	Arts and industry.	Other special schools.	Total.
1888-89	935	999	518	651	172	3,275
1889-90	912	1,016	652	795	611	3,986

It is a hopeful sign if these figures may be depended upon, as they presumably can be, as indicating that a fair proportion of the youth of Bengal are seeking to devote their talents to professions comparatively new to them. The attendance at the Seebpore Civil Engineering College, 265, was the largest yet recorded. The Lieutenant-Governor observes the remark quoted by the Director that insufficient opportunities are afforded to the students of acquiring familiarity with practical work. He concurs in the necessity of recognising more fully the educational purpose of the workshops, and trusts that their requirements may be met, so that the Seebpore College may become, as it now is to a great extent, the centre of true technical education in Bengal. The Government School of Art continues to attract students, 178 having attended it as compared with 158 and 172 in the last two years. The need of a new building for the accommodation of the school and the attached Art Gallery in place of the dilapidated and altogether unsuitable houses now rented for the purpose has been recognised by Government as a matter of pressing urgency.

Mr. E. W. Collin, c.s., on the existing arts and industries in Bengal, in connec-

tion with technical education, came before Government. A number of his suggestions have been under consideration, and the Lieutenant-Governor trusts that in due course some practical measures may be selected for adoption.

11. The attendance and expenditure in schools for native girls are shown in the following statement, in which the total figures for the previous two years are given for

comparison:-

	15	Number			E	KPENDITUR	н.					
Class of schools.	of the rolls on			daily From public		public funds.		From private funds.		Total.		
	schools.	March 1890.	reh wontnly.	arch wontnly.		larch wontnly.		Provincial Revenues,	District Funds.	Municipal Funds.	Pees.	Other sources.
Managed by Government		235	202	181	Rs. 17,682	Rs.	Rs.	Rs. 5,761	Rs. 628	Rs. 24,071		
Ditto by District or Muni-	5	223	208	134	143		1,140	*****	55	1,338		
Aided by Government or by District or Municipal Boards Unaided	1,913 233	40,614	37,080 4,407	28,507 3,264	69,974	23,213	8,019	17,165 938	1,63,516 18,725	2,81,887 19,663		
Total	2,153	45,690	41,897	32,086	87,799	23,213	9,159	23,864	1,82.924	3,26,969		
For 1889-90					No. of the least	1,20,171		2,00	5,788			
Figures for 1887-88 Do, for 1888-89	2,247 2,302	46,038 47,888			5.35	1,17,214			0.659 8,915 a	3,07,873 3,10,021		

The number of girls' schools has declined from 2,302 to 2,153, and their pupils from 47,888 to 45,690. These figures are the lowest for the three years under examination. The number of girls reading in boys' schools, which had fallen from 37,785 to 35,079, has again decreased to 32,673. The net result therefore is a loss of 149 schools and 4,604 pupils. Greater stringency has apparently been exercised in the administration of the rules for rewards and in the realization of fees. Two young native ladies were admitted to the degree of Bachelor of Medicine, and another passed the Preliminary Scientific L.M.S. examination. Eleven young ladies of the certificate class of the Medical College also obtained the College license to practice medicine and surgery: eleven more were in the certificate class at the close of the session. There were 22 female students in the Campbell Medical School and five in the Cuttack Medical School. From the Bethune College three native candidates out of four passed the First Arts Examination, and all three candidates at the B.A. Examination passed. The second examination for the award under the new standards of the special girls' scholarships sanctioned for Calcutta and the neighbourhood was held during the year. As the extension of these standards to the mofussil has been sanctioned, they would be very widely adopted, it is said, if it could be found possible to create a certain number of special scholarships for girls in each district: at present they have to compete for scholarships on equal terms with the boys at the primary scholarship examinations.

12. The statistics of European education at the end of the last three official years may be exhibited as follows:—

OR THE PER	APPLIED LANGUE	CHARL	1887-88.	1888-89.	1889-90.
Schools	等医生活性对外的	19 19 19	72	71	68
Pupils	A TO GET MAKE THE		6.541	6.682	6.710

In the last year the number of boys increased by 40, while there were 12 girls fewer under education. The boarding school at Kurseong is still the only Government school in the province. Out of the 6,710 scholars, 3,383 were in schools under Roman Catholic management and 1,646 under the Church of England. The total cost of European education in Bengal was Rs. 6,50,812, of which Government paid Rs. 1,72,168. Several important changes in the Code came into force during the year. A set of inter-school transfer rules was introduced: they have been very beneficial in preventing capricious transfers, and have improved the financial condition of the schools by compelling parents to pay the schooling fees. Provision was also made for the substitution of fixed grants in place of payment by results in selected schools. The imposition of fines for uncorrected errors in the keeping of attendance registers was also sanctioned. The recognition of the high school examination by the University

has not induced any of the boys' schools to substitute this examination for the Entrance Examination; the reason is said to be that no scholarships are awarded on the result. The establishment of scholarships for the high school examination has been proposed.

The total number of Muhammadan pupils again rose from 423,564 to 436,653, and the percentage on the total number of pupils from 28.5 to 29.06, the proportion of Muhammadans to the whole population being 31.5 per cent. This increase was altogether due to a rise of 22,024 pupils in private institutions teaching the Koran only. In public institutions the number of Muhammadan pupils decreased by 10,624, the ioss of Muhammadan pupils in lower primary schools being 14,889. As already explained, the large increase in the number of Koran schools, and the corresponding decrease in lower primary schools, were largely due to a change of classification in parts of Eastern Bengal. The number of Muhammadan college students fell from 240 to 179, and percentages show that candidates of this creed suffered at the Entrance Examination of 1889 more severely than others. At the Entrance Examination of 1890 the successful candidates increased from 54 to 125. The Lieutenant-Governor observes with great satisfaction that, in spite of a temporary decline in the colleges, the appreciation of Muhammadans for English education continues to grow steadily and even The first reports furnished by the recently appointed Assistant Inspectors for the supervision of Muhammadan education in Eastern Bengal and in Behar have been received, and show that the special requirements and difficulties of this branch of the community are now receiving and will receive adequate attention. The Director has, by giving a resumé of the facts, confined himself within the proper limits of an annual report, and the Lieutenant-Governor will await any definite suggestions for action which he may desire to offer. annual income of the educational portion of the Mohsin Fund continues to be about Rs. 63,100, and the actual expenditure debited to this account is stated at Rs. 61,067. The question of the redistribution of the grants from this fund may be considered with any other points which the Assistant Inspectors may The comparative success of the Muhammadans in the University exami-

		M.A.	B.A.	F.A.	Entrance.
1888-89	GARLES DET THE	1	18	21	54
1889-90	14 July 1910	3	21	57	125

nations in the last two years is shown by the following figures:-

There was also a large increase in the number of middle and upper primary examination certificates gained by Muhammadan students, though somewhat fewer passed at the lower primary examination. The total number of pupils at the madrassas under Government management remained exactly the same as in the preceding year, viz. 1,456, but the total expenditure rose from Rs. 58,865 to Rs. 61,760, the increase being nearly all at the cost of Government. Sir Steuart Bayley notices with pleasure the excellent report of the discipline and tone of the Nawab of Moorshedabad's Madrassa with its £3 pupils.

14. The number of pupils from among the aboriginal races rose from Education of aborigines and indi27,246 to 29,749, i.e. by 2,233. This is more than a recovery of the loss recorded in the last year's report. This increase was shared by most of the tracts of country inhabited by these races. The greatest gain of 1,559 pupils was in Chota Nagpore, of whom 1,390 were non-Christians and 169 Christians. The pupils in the Missionary schools in that division increased from 3,127 to 3,582, and the expenditure from Rs. 38,703 to Rs. 39,011, of which Government contributed less than one-fifth. No aboriginal pupil passed any University Examination as in the previous year, but 427 passed the departmental examinations. Of these, 367 succeeded in the lower primary scholarship examination (a falling off from the 378 last year) and 36 (as compared to 15) in the upper primary scholarship examination

The development of indigenous institutions during a triennial period is apparent from the subjoined figures:—

			1887-88.	1999-99	1883 30
Schools Pupils		The second	10,048	11,709	13,867
	State of the same		96,721	117,284	139,603

This is a remarkable and continuous rise. Analysing the figures, it appears that there was a considerable decrease in advanced Arabic or Persian schools, and a gain in Sanskrit tols. There was a very large increase in the number of elementary pathsalas and of Koran schools, as already noticed. The Assistant Inspector's observations on the latter and the maktabs are noted, but call for no

immediate orders.
15. The Lieutepant-Governor has had the pleasure annually of acknowledging the services rendered to Government by the Director in his successful administration of the Department of Public Instruction, and the merits of the reports submitted by him and Mr. Tawney. The record of the year under review fully maintains the Director's high reputation. Sir Steuart Bayley desires to take this opportunity, the last of which he will be able to avail himself, to offen him applied thanks the Confermation. self, to offer his cordial thanks to Sir A. Croft, Mr. Tawney, Mr. Bellett, Mr. Nash, Rai Radhika Prasanna Mookerjee, Bahadur, Baboo Brahmo Mohun Mullick, Rai Dinanath Sen, and the many other excellent officers of the Department employed in the direct work of instruction as Principals and Professors of Colleges, for the valuable advice and the loyal co-operation which he has always received from them.

By order of the Lieutenant-Governor of Bengal.

C. E. BUCKLAND,

Offg. Secretary to the Government of Bengal.

### Rainfall, Weather, and State and Prospects of the Orops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 25th October 1890.

-	No.	District and direturn.	ate of	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects
BE	NGA	L. Western Dist	leves I		THE ROOM THE STATE OF THE PROPERTY AND THE PARTY OF THE PARTY.
	1 1		et. 25, '90	Nil 1:28	Weather—cold in the morning. Prospects of amus and sugarcane good.  Prices of common rice:—
		Bankoora	., 25, '90		Srs. Ch.
	3	Birbhum Rampere Haut	, <b>25</b> , '90	0·49 0·06	menced. Price of rice stationary.  Cold season has set in. Crops excellent. Price of rice from 17 to 19 seers por rupee.
WASS DIVE		Miduapur	., 25. '90	107-3	Weather—cool and bright. Transplanted paddy, indigo, and sugarcane doing well. Prospects in Contai fair except in submerged tracts. Prices of common rice:—
BURDWAS DIVE.	5	Hooghly Serampore Jehanabad	., 25, '90 	0.07 3.91 0.15	Sudder
	\		" 25, '9c 	0·11 0·02	Sudder 14 Serampore 14 Jehanabad 16 Weather—varying. Prospects of amus crop favourable. Common rice selling at 14 seers per rupee.
	6	Allowed The Street Lines	oct. 28, '90	1.51	Weather—seasonable. Prospects of standing crops good except in the small flooted tracts of the Bussirhat subdivision. Ploughing for winter crops going on. Common rice sells at from 13 to 15 seers per rupee.
SIDEMOT DIVE.	7	Nuddea Kushtea Chuadauga Ranaghat	, 25, '9(·  	0·12 1·95 1·35 1·89	Weather—clear and cool. Amus rice and sugarcane on high lands doing well.  Sowing of winter crops going on. Price of rice much as usual.
PRESIDENC	8	Bagirhat Satkhira	,, 25, '90  ,, 25, '90 	1·11 2·52 2·36 2·37 1·83 1·64 7·6	Weather—seasonable. On 22nd afternoon there was a strong wind, damaging many houses and uprooting trees, &c. Prospects of amus crop good is Sudder and Bagirhat subdivisions, but not so in Satkhira subdivision.  Weather—rainy in the beginning of the week; latterly fair. Sowing of coldweather crops stopped for rain. Price of rice rose in Narail.
	10	Bungong Moorsnedabad	" 25, 90	0.70 Nil	Weather—getting cool. Amus doing well. Prospects favourable. About 12,000 bighas of paddy land was submerged by the overflow of the Brahmini river, and the damage estimated to be about 4 annas, as the water remained for two or three days. Rubbi being sown. Prospects of kalai good. Agricultural loans and charitable relief still being distributed.
1	11	Dinsgepur Thakurgaon	,, 25, '90	Nil 0.05	Weather—seasonable, Prospects of crops good. Price of rice stationary.
	12	Rajshahye	" 25, '9.	Figures not given. 3.89	Weather—fair, with clouds here and there and drizzling rainfall on 23rd.  Hot days and cool mornings. Condition of haimanti paddy good. Preparation of land for sowing of winter crops going on. Steeping of jute nearly completed.
Dive	13	Nowgong Rungour Nilphamari Gairenda	., 25, '94	0.06 Nil 1.82 3.40	Weather—fine, clear and hot; cool at night. Prospects of amun continue good.  Mustari is being sown in some places. Sugarcane is being cut. Prices high.
RATHRARYS	14	Kurigram Bogra Sherpur	., 25, '90	0·03 0·38 0·48	Weather—cloudy and showery in the middle of the week; now fine, with northerly breeze. All standing crops promise well after allowing for the damage caused by floods, as previously reported. Of aman paddy 13 annas outturn is expected. Preparations for winter and spring crops are going on well. Common rice is selling at 18 seers a rupee.
-	15	Pubna	, 25, '90	0.45	Weather—cool and bright. Prospects of amun continue good. Rubbi sowings damaged by the late heavy rain. Prices as before.
1	16	Darjeeling	, 25, '90	012	Weather-very fine. Prospects of crops good
1	17	Julpigoree ,	, 25, '9(	Nil	Weather—seasonable. Haimanti rice expected to yield good outturn. Harvesting of jute continues. Common rice selling at 14 scors per rupes at the Sudder station.

N	lo.	District and return		Rainfall at Sudder Station in inches.	
BEN	GAI	-concluded.			
		Eastern Dis	triots.		and the second s
1	18	Dacca	Oct. 25, '90	2.90	Weather—cloudy and rainy, Harvesting of jute completed. Amun padd thriving. Maskalai being sown. Cultivation for mustard and pulses goin on. Common rice sold at from 12 to 15 seers per rupee.
DACCA DIVE.	19	Furreedpur	,, 25, *90	8.47	Weather—foul and rainy during most part of the week. Standing crops fall Sowing of winter crops in progress. Common rice selling at 13 seers per rupee in Goalundo and Sudder subdivisions.
DAC	20	Backergunge	,, 25, '90	2.19	Weather—sensonable. State and prospects of crops good. Common rice selling at about 13 seers per rupee.
10000	21	Mymensingh	,, 25, '90	3.79	Rain every day. Prospects of crops good. Common rice selling at 12½ seem per rupee.
9.5	771	EAST OF LIES AND			A Committee of the Comm
Dire.	22	Chittagong	,, 28, '90	1.13	Weather—seasonable. Outturn of aus twelve annas. State of amun promising.  Prices stationary.
Chiliagone Dies.	28	Noakholly	,, 25, '90	4.18	Weather—unseasonable : cloudy and rainy. The late rain has done good to the amun plants. Prospects of crops good.
	24	Tipperah	,, 25, '90	2.69	Weather—rainy and cloudy. Amun paddy prospering. Jute cutting over.  Price of rice stationary.
,	25	Chittagong Hill Tracts.	,, 23, '90	0.44	Weather—hot during day. Sky cloudy almost throughout the week. Rainy on the 22nd and 23rd. Gathering of jum crops, except cotton and yam, nearly over. Cotton here and there ripening, but generally in flower. Propects of amun crop and sugarcane good. Ploughing of lands for mustard and vegetables is being carried on. Common rice selling at 11 seers 6 chit.
BEI	AR.	Hill Tipperah			tacks per rupee. Report not received.
1	26	Paina Barh	" 25, '90 '	0.15	Weather—hot; cool at night, Paddy looks very well. Sowing of rubbi crops being pushed on. In some places rubbi sown and germinated. Poppy field also being prepared and will be sown shortly. Prospects of other crops on the ground favourable. Prices of food-grains stationary.  Weather—clear days and cold nights. Prospects of paddy and other crops
	27	Gya	20, 50	NII.	favourable. Sowing of rubbi going on. Prices of food-grains stationary.
	28	Shahabad Buxar	., 25, '90	0.6 0.45	Weather—cooler. Paddy good. Ploughing for rubbi proceeding. Prices stationary.
	29	Durbhunga	,, 25, '90	Nil	Weather—bright and cold. Rice crop looks very promising and in some places coming into ear. Rubbi sowings and tobacco transplantation being pushed on. Prices stationary.
	80	Mozufferpur Hajipore	,, 25, '90 	Nil 0.23	Weather—fine. Paddy prospects good. Sowing of rubbi stopped owing to rain of last week, but it will commence again almost immediately. Prices stationary.
	81	Sarun	,, 25, '90	Nil	Weather—fine and clear. Strong west wind and colder weather for the last two days. Rubbi and rice prospects excellent. Prices slightly falling.
-	32	Chumparus Bettiah	" 25, '90 …	0·28 0·05	Weather—days hot, nights cool. Prospects of paddy very good. Preparation of land for winter crops stopped by the continuous rain of the last week.
1	33	Monghyr Beguserai	" 25, ′90 	Nil 0.04	Weather—seasonable; getting cool gradually. State and prospects of all standing crops good. Rubbi crops being sown everywhere.
-	34	Bhagulpore Banka Mudhepura	" 25, '90 	Nil 0.02 0.09	Weather—clear; mornings and evenings cool; heavy dews at night. Winter rice promising. Kurthi, rahar, and sugarcane doing well. Lands being prepared for wheat and other rubbi crops.
Caracteria Cara Cara Cara Cara Cara Cara Cara C	35	Purnesh	,, 25, '90	Nil	Weather seasonable. Prospects of crops good. Rubbi crops still being sown.
	36	Maldah Shibgunge Gajote	" 25, '90 	Nil 6.35 0.19	Weather—seasonable. Prospects of all standing crops continue favourable.  Kalai sowings nearly completed. Preparation of lands for rubbi crops going on. Common rice selling at from 13 to 18 seers per rupee.
1	37	Sonthal Perghs.	,, 25, '90	Nil	Weather—getting cool and pleasant. Prospects of rice crop excellent; an outturn above the average expected. Cutting of early rice commenced.

No	And the San Control of the San	nd date of	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
18	SA.			
(	8 Cuttack	Oct. 25, '90	Nil	Weather—seasonable. General prospects of crops continue good.
1	Pooree	" 23, ′90	0.83	Weather—seasonable and settled. Sarad crop in ear. Beali and mandia being harvested. Lands being ploughed for rubbi crops. Price of common rice stationary.
ķģ.	Balasore A NAGPORE.	" 25, '90	Nil	Weather - cooler. Condition of standing crops generally good.
80	uth-West Front	ier Agency.		
4	1   Hazaribagh	Oct. 25, '90	Nil	Weather—seasonable. Winter rice and sugarcane doing well. Rubbi crop being sown. Prices more or less stationary.
4	2 Lohardugga	" 25, '90	Nil	Weather—seasonable. Harvesting of gora rice nearly finished. Prospect o winter rice continues favourable. No material change in prices.
4	3 Singbhoom	,, 25, '90	Nil	Weather—seasonable; cloudy but clear again. Beera or highland paddy being reaped and doin or lowland paddy doing well. Surgooja being sown Yield of tussar crop estimated at about 8 to 10 annas. Prices steady.
4	4 Manbhoom	,, 25, '90	Nil	Weather-cold and dry. Prospects of crops very favourable so far.

Published for general information.

CALCUTTA; REVENUE DEPT., The 28th October 1890. C. E. BUCKLAND,
Offg. Secy. to the Govt. of Bengal.

#### Meteorological Report of the Province of Beng

							Profession and the	STATIC	N OR	SERVATIO	нь,		10 (4)	163
		AIR	PRESSUI	RB.	WIN	т.				TEMPERA	TURE.			
District.	Representative station,	Mean barometric height, 8 A.M.	Mean reduced to sea-level.	Variation from mean.	Prevailing direc- tion.	Mean wind ve- locity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily tem- perature of weak.	Variation from
	Pooree	29-939	29'951	+.036	P	161 195	88°2 89°7	22nd Oct.	70°6 69°9	22nd Oct. 23rd "	86'5	74.7 71.8	80.6	-1
Poores}	Gopalpore	29'938	29.946	001	NNW NW &	147	86'4	24th	70'1	22nd	84.5	72.5	78'5	-2
	False Point	29.881	29 964	+.021	NNW. Westerly	29	89'4	20th	70'8	23rd ,,	88'6	73.2	80.0	-1
Cuttack "	Cuttack	29.911	29*971	+ 021	NNWA	161	86'4	18 to 22	71.8	23rd	86.0	73'4	79.7	-0
Balasore	The second of the	29*919	29 946	+.003	Calm	226	85.3	24th	78'0	21st	83 6	75 8	79'7	-1
South 24-Pergunnah	Saugor Island		100		North- Westerly				72.2	22 & 23	87.2	73.0	89'1	
Midnspore	Midnapore	29 800	29.954	006	N	216	89.3	24th .,	100				13	+0
14-Pergunnahs} Howrah}	Calcutta	29.925	29-947	+.003	Calm	55	86.0	19th ,,	72.2	21st ,,	83.2	78 4	78'5	-1
Burdwan	Burdwan	29.864	29-969	+ '020	Calm &	44	87.6	24th	78.4	21st ,,	84'9	78.4	79.9	-1
Bankoors	Bankoora	29-640	29*948	+ '004	Ñ	38	87.6	24th	71.1	22nd ,,	86.0		79'2	-1
Beerbhoom}	Raneegunge	29-637	29.978	+.088	NNW	47	86.2	24th ,,	70.4	22nd ,,	84.6	71.7	78:2	-1
West Burdwan	Berhampore	29.882	29.950	+ 001	NNW	107	85'6	20, 21 & 24	72'8	20 & 21 ,,	84'3	72'9	78.6	-2
Nuddes	Krishnaghur.,	29.897	29'946	011	ENB	86	85'4	24th	71'3	24th	84'6	72.9	78'8	-1
Jessore}	Jessore	29.908	29-942	-'004	North-	90	86.7	18th	73'9	21 & 23 ,,	84'7	74'6	79-7	-1
Khoolus)	The Maria	29.863	29'957	+.006	Westerly South-	52	87.7	19, 20 & 22	71.7	20th ,,	85'8	74'5"	79 9*	+0
Chittagong	Chittagong Demagiri .				Easterly		1000	ot.	oeived,			N. S.		
Chittagong Hill Trac	Barrisal	29-920	29.932	+ '015	North-	82	86.8	18, 19 Oct.	71.9	21st	83*7	74.0	78.9	-(
Nonkholly	Noakholly	29'909	29-953	+*036	Easterly S & NE	161	80.0	18 to 20 "	71.8	20th	84'6	73.8	79.2	-0
Purreedpore	Furreedpore	29'904	29-944	0	Calin	68	85.2	19th .,	72.4	21st "	82.7	73 7	78'2	-1
Daces	Daces	29.906	29-929	- '008	Variable	111	881	18th ,,	69.7	21st	84.7	73.8	79.0	-1
Commiliah	Commillah	29-9129	29-9487	+*018	North-	67	87.4	19 & 28 ,,	70'3	21st	84"7	72.5	78'6	-5
Mymensingh	Mymensingh	29'884	29*943	+.013	Basterly North- Easterly	68	85.3	22nd ,,	69.6	ilst "	82'8	72.0	77.4	2
Bogra	Bogra "	29'868	29.932	+:014	Calm	45	84.3	20th .,	70'1	21st	82.7	72.5	77.6	-2
Pubna	Serajgunge	29.893	29*940	001	North- Easterly	45	85'7	19th ,,	69.2	2166	83.5	72'1	77.7	-1
Rajshahye	Rampore Beau-	29.875	29'946	+ '018	Variable	46	85.3	20th ,	69.7	Slat "	83.6	73-2	78.4	-0
Maldah	Maldab	29.877	29.961	+ 0007	NW	59	85.8	20th ,,	68.1	19th ,.	84'5	70 5	77'9	-3 -1
Dinagepore	Dinagepore	29.837	29.960	+.018	North- Westerly	48	86.8	24th	69.2	104-	84'4	71.3	77'9	-(
Rungpore	Rungpore				Variable,				63 6		83.8	66.5	75.0	-9
Julpigoree	Julpigoree	49-665	29.960	+ '006		2	85'4		46.2	2047	60.8			
Darjeeling Hill Tracts	Darjeeling	23.063	-	+.004	ESE	75	64.1	MINE COLOR		20th ,,		48.2	54.4	+(
Purnesh }	Purneah	Zu-840	29:969	+ '029	Variable	40	87.7	22nd	67.5	19 to 21 ,,	841	68.9	76.5	
Mozufferpore	Mozufferpore	29.774	29-958	-	Galm	35	82.8	24th "	72'2	18th .,	83.8	74.5	79.1	
Durbhungs	Durbhunga .	29.795	29.957	+ '013	Variable	28	86.0	23rd ,,	67.0	isth "	84'3	69 1	76.7	-5
Chumparun	Motihari	29.750	29-984	+1053	Variable	58	87.2	24th ,,	66'8	24th ,,	84.6	68.2	76.4	-(
Satus	Chupra	29.778	29-976	+ '036	Westerly	41	86.8	24th "	71.7	18 & 20 ,,	84'8	72'3	78.6	
sheheled 5	Dehree .	29.615	29:978	+'018	ssw	21	86 8	21, 24 24th	68.8	24th ,,	85.7	68'4	77:1	1
Shahabad	Buxer Arrah	19°730 29°776	29°978 29°975	+1027	Westery SW	39	88 4	24th	67.7	24th	85.7	69.8	7. 8	
Gya	Gya .	19.208	29'986	+.025	8	109	87.4	24th ,,	68:3	23nd ,,	85.9	69'4	77.7	-
Patna	Bankipore .	29 758	29 976	+ .030	Southerly	24	85.4	23 & 24 ,,	69.2	18 & 19 ,,	84.0	70.5	77.2	-
South Hhaguipore	Bhagulpore	39'794	28.80	+'026	Calm	5	86.5	24th .,	67:5	18 A 21 "	83.8	69.4	76.6	-
Southal Pergunnaha	Doomks	22'452	29-963	+ '018	NW	50	85.6	24th ,,	68'6	21st	84'5	69.5	77.0	-
Hausribagh	Hazaribagh	27'942	29 989	+'011	Calm	70	81.9	24th "	62'3	22nd ,	80.5	63'4	71'8	-
Loharduggs )	Ranchee	27-821	29 983	+'015	Calm	92	81'5	20 & 24 .,	59.9	19 & 21 ,,	80.1	61.8	70'9	1
Singbhoom	Ohyebasas	29'189	29-969	+.025	Calm	25	87'9	19th .,	05:8	21 A 23 ,,	86.3	6:18	76'9	-
1	Sibsagar	29 656	29.999	+.018	NB	100	851	24th	66.9	22nd ,,	83.8	70.4	77'1	
A Non 120	Dhubii	29.839	29.810	+.003	North- Easter y	105	82 8	18 & 22 ,,	68'4	2 th ,,	82.0	70.9	76.4	
	Silchar	29'844	29'952	+'004	Calm	SPORTS	93.0	22nd .,	71.8	20th ,,	87.0	73'2	80.1	-

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for lines.

The humidity of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by and an overcast sky by 10. The fluid are the numerical means or average of the rainfall in that district determined from the resums sent in by the sub-divisional station for the period in question during the Passacosi in the district sending in returns divided by the number of stations. A rainy day is one on which at least hundredth of an inch fell.

the week ending Friday, the 24th of October 1890.

100		die i		S. Fresh	Make	DISTI	CICT OB	SERVATIO	NS.				
K. K.	1 2		表集.	Contractive of			RAIN	WFALL.					
B.TO	week	Or	WREK.	Sino	e 1st of mo	oth.	Sinc	e 15th May	1890.	ays.	number y days.	Representative station,	District.
Average cloud at 8 A.M. for	Rainfall of week observing station.	Mean for district,	Normal mean.	Mean for district,	Normal mean,	Variation,	Mean for district.	Normal mean.	Variation.	Average number of rainy days.	Normal un of rainy d		
3.9	0°83 Nil 0°75	0.21	1.00	6'40	6.40	+1.40	62.06	50.81	+11.25	1.8	1:9	Pooree Gopalpore Palse Point	Poores
3'4	Nil	0.85	1.58	6.05	4.20	+2'42	60-97	48.55	+ 12.42	0.4	1.6	Cuttack	Cuttack
1.3	Nil	0.02	0.68	8.07	4'34	+3.73	59.19	50'85	+8.34	0.3	1.5	Balasore	Balasore South-West Midnapore
74	2.19	1.33	1'41	16.35	5'88	+10.47	63.63	59'06	+4.57	2.3	1'4	Saugor Island {	South 24-Pergunnaha
2.3	Nil	Nil	0.22	4.60	8.20	+1'10	49.87	49:74	+0.13	0.0	0.8	Midnapore	Midnapore
61	1.27	0.21	0.40	7:40	3:41	+3.89	55'19	49'89	+5'80	1'8	1.0	Calcutta	Howrah Hooghly
61	Nil	Nil	0.34	4.72	3.51	+1.21	60.89	45'02	+15.87	0.0	11	Burdwan	Burdwan
17	NII	Nil	0.35	5'84	2.01	+2.43	52.01	50.75	+1'26	0.0	1.0	Bankoora	Bankoora
1.8	1.58	0.44	0.59	7.76	2.99	+4*77	63-33	50:91	+12:39	0.2	0.0	Raneegunge	Reerbhoom West Burdwan
3.6	Nil	9.02	0.30	7:17	3:94	+3.53	59-95	49'35	+10.60	0.3	0.8	Berhampore	Moorshedahad
5.6	0.09	0.53	0.40	8'74	3.23	+5*22	54:99	47'60	+7'39	1.6	11	Krishnaghur	A STREET, ST. LEWIS CO., LANSING, MICH.
6-7	2.78	2:33	0.61	7.85	3.61	+4*24	58'47	51'87	+2.10	219	1.2	Jessore	Jessore Khoolna
6.0	0'85	1.58	0.63	3'72	5'10	-1.38	117.52	108'94	+8.28	3'5	1'5	Chittagong	Chittagong
			0.72		6.05			76.69			1.5	Demagiri	Chittagong Hill Tract
5.8	2.28	1.80	0:56	7.67	4.23	+3.14	68.16	73.35	-519	2.8	1.2	Barrisal	Noakhally
1.6	13000	8.98	0.62	8'50	5.67	+2.93	96'55	102.36	-5'81 -8'82	3.2	1.4	Noakholly	Furreedpore
8'4		2.08	0.49	7'20 5'15	3.61	+1.54	58'16	57:91	+0.52	4'0	11	Dacca	Daces
5.0		A SECTION	0.20	0.10	4'84			66:16			1.0	Commillah	Tipperah
6"7	1	2.67	0.67	9.69	4.67	+5.03	76*34	67:88	+8'96	2.8	1.1	Mymensingh	Mymensingh
5.6	0'46	10.28	0.20	11.39	4.08	+7*28	78.28	56:17	+22*41	1.0	0.7	Bogra	THE RESERVE OF THE PARTY OF THE
6.6	0.10	0.35	10.84	6.20	3.83	+1'66	54'34	51'85	+2'49	2.5	0.8	Serajgunge	Pubna Rajshahye
20	9 17 18	0.58	0.50	9.96	3·22 2·88	+6.74	74·87 62·12	52.16	+22'71	0.0	0.7	Rampore Beauleal	Maldab
2.1	1 275	0.01	0.07	11.44	3.14	+8'27	81.74	55.78	+26.01	0.2	0.6	Discourse	Dinagepore
11		0.14	011	18.38	4.54	+14.04	106.61	72.43	+34'18	0.2	0.7	Rungpore	Rungpore
13		0.03	0.32	14.98	4.22	+10'43	154-51	108'40	+46'11	0'2	0.0	Julpigoree	Julpigoree
8.3	0'12	0:21	0.42	14'08	4.67	+9:36	165.33	117'82	+47'51	1.0	11	Darjeeling	Darjeeling Hill Tract
14		Nil	0.08	6.53	2.78	+3'45	80'67	57.15	+23.22	0.0	0.4	Purneah	Purneah North Bhagulpore
1.0		0.08	0.13	1.79	2'79	-1.00	52.57	42.26	+10.31	0.3	0.8	Mozufferpore	Mozufferpore
1.3	10 10 10 10 10 10	12.77	0.03	1.74	2.80	-0.26	57.63	43'24	+14.39	0.3	0.3	Durbhunga	Durbhunga
14	Service and the service of the servi	0.16	0100	5.67	3.83	+2:34	68:47	46'23	+22.25	1'0	0.4	Motihari	Chumparun
0.9	Nil	Nil	0.11	1'48	\$'72	-9.24	53-60	41'18	+12.42	0.0	0'4	Chupra	Sarun
0.1	in thous									do a Figure	1 84 H 2	Dehree	Shahabad
1.0	0°40 0°06	6.07	0.32	1'34	2.78	-1'41	49.20	38.25	+11.07	0.4	0.4	Buxar Arrah	
1.17		0.03	0.12	0.43	2'44	-2.01	56'93	40°17	+16:76	0.3	0.4	Gya	Gya w w
1.3		Nil	0.16	1.34	2.20	-1.16	48.10	39.67	+8'43	0.0	0.2	Bankipore	Patna South Bhagulpore
1.3	Nil	Nil	0.18	3.12	2:48	+0.74	62.25	41'66.	+10'59	0.0	0.8	Bhagulpore	Monghyr
0	Nil	0.04	0.52	10.10	8.11	+7'08	63.52	49'52	+13.73	0.8	0.2	Doomks	Sonthal Pergunnahs Hazaribagh
110	ST CONTROL	NO	0.12	1:00	2'61	no.	America.	48'68		0.0	0.2	Hazaribagh	Lobardugga
	NII	NII	0'35	1.63	2:27 2:82	+0.40	47.01	46.75 45.65	+0.52	0.0	0.8	Ranchi	Manbhoom
2:3	THE RESERVE OF THE PARTY OF THE	Nil	0:47	173	2'94	-0.21	33-94	49.71	-15.77	0.0	1.0	Chyebassa	Singbhoom
8.8		0 195210	600									Sibsagar	Assam
2.0	0.10	1		Bur Sal						SHELLER		Dhubri	Addison in

Tyears. The variations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.

The variations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.

The means of the part of the sky covered, the whole sky being denoted by 10. Under the head District observations of rainfall the normal means are negative when the part of the sky covered, the whole sky being denoted by 10. Under the head District observations of rainfall the normal means are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.

Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 24th of October 1890.

					R	AINPALL	•			To	TAL				
Meteorological division,	District.	Station.	Saturday, 18th October.	Sunday, 19th October,	Monday, 20th October.	Tuesday, 21st October.	Wednesday, 22nd October.	Fhursday, 23rd October.	Friday, 24th October.	Number of rainy days.	Rainfall of week.	Total rain- fall since 1st of month.	Average total rain- fall from 1st of month,	Total rain- fail since 15th May 1890.	Aven rain from May date
Orieba	Pooree	Pooree Khurdah Banpur False Point Gop Satpara Pipli	0°85 0°35 0°07	0.08		0.08				2 1 Nii 2 Nii 1	0°93  0°35  Nil  0°75  Nil  0°06	9:56 7:29 6:05 10:68 7:57	6'91 5'50 5'46 8'95 P	65°35 63°45 57°00 62°38	2023
	Outtack	Jagatsingpore Banki Cuttack Kendrapara Jajpore Dharmsala Salipore	1°68							Nil 1 Nil 1 Nil Nil Nil Nil	Nil 1'68 Nil 0'06 Nil Nil Nil	6 88 5 85 8 44 7 19 6 23 11 90 6 50	5'74 3'88 4'23 5'00 [3'76 ?	59'50 62'22 80'10 52'44 52'60 52'88 50'24	44) 651 537 507
	Balasore	Chandbali Bhuddruck Sorah Balasore Jellasore Baripodah	0.10							Nil Nil Nil Nil Nil Nil	0·10 Nil Nil Nil 0·08 Nil	7'96 8'56 5'85 8'69 10'36 7'29	5:39 3:65 4:17 5:01 4:08 3:77	51.07 54.69 59.59 65.39 64.62 60.16	68* 68* 68* 56* 50* 52*
SOUTH-WEST BENGAL.	Midnapore	Contai Saugor Island Tumlook Midnapore Ghattal Kukrahaty Garbetta	0.01	0.05	0.18	0°19 1°55  1°10				3 Nil Nii Nii Nii 1	0°38 2 19 Nil Nil 1°10 0°02	17°14 20°28 7°10 4°72 1°98 10°25 3°58	6'04 7'44 [8'25 3'84 8'41 9	62°81 66°13 57°90 47°09 44°61 50°99 46°23	571 657 407 407 537
	24-Pergunnalis		0.36			1'48 1'45 0'16 0'08	0°49 0°04 0°46 0°93 0°93	0°15 0°02	0.03	1 2 3 1 3 2	1'43 0'64 1'51 0'36 0'65 1'01 0'98	11.65 14.03 9.68 8.41 12.04 12.10 10.89	4'17 P 3'44 2'89 8'50 8'76 8'54	61'97 66'69 61'91 50'91 55'75 55'77 58'67	\$61 552 474 407 479 558
	Howrah Hooghly	Howrah Mohesreka (Ooloberiah) Serampore Hooghly Jehanabad	0.20		0.08	0.02	0.01	0.04		Nil 2 2 Nil	0°11 Nil 0°43 0°07 Nil	7'06 5'28 8'41 6'17 3'21	3:36 3:12 3:36 3:41 3:67	51°34 59°57 54°27 52°05 51°57	40°3 50°4 40°3 50°4
	Burdwan	Culna Burdwan Cutwa Raneegunge Mankur		1.28						Nil Nil Nil Nil Nil	Nil Nil Nil 1'28 Nil	3°97 3°50 6°69 8°82 3°38	3·29 8·09 8·24 2·85	54'11 64'97 63'56 60'43 47'80	42% 60% 467 477
	Bankoora	Bankoors Bishenpore Maliars Khatra Indas Kotalpore Anda Gangajalghati Raipore Nonamukhi								Nil Nil Nil Nil Nil Nil Nil Nil Nil	NII NII NII NII NII NII NII NII	4 '76 4 '66 5 '92 6 '02 5 '74 6 '68 9 '20 3 '87 6 '18 4 '51	3:87 2:45 2:82 3:22 9 9	57.76 50.95 59.23 40.06 59.97 68.94 55.11 63.75 53.29 52.74	491 501 471 541
	Beerbhoom	Bh. Soory Hetampore Rampore Haut Bolpore Murarai		0'49						Nil Nil Nil Nil Nil	0'49 Nii Nii Nii Nii	6°56 8°63 8°08 4°03 7°11	2.05 2.06 3.25 - P	61'94 59'15 72'36 56'23 56'46	53° 50° 50° 7
	Nuddes	Ranaghat Kishnaghur Choosdanga Meherpore Kooshtea	0.12				0.08	0°50 0°50	0.00	9 9 1 1 2	0°23 0°12 0°50 0°06 0°24	7:50 7:67 8:27 13:25 6:90	2.93 3.79 3.65 2.90 4.29	55'46' 61'46' 47'08 58'86' 52'09	451 491 46 501
	Khoolna	Satkhira Bagirhat Khoolna Nakipur Rampal	0.18				1.08 6.32 1.03 1.13	1°50 6°03 0°78 6°35	0.06	2 5 1 3	1*60 2*52 1*24 6*95 2*28	7'04 6'35 7'90 15'13 11'44	3.74 4.37 3.27 P	57°13 62°51 52°88 75°03 65°78	55" 59" 58" 2
	Moorshedabac	Jessore Jhenidah Magoorah Bongong  Kandi	0.36 0.50 0.00				0°54 0°40 0°42 0°45	1'79 0'32 1'02	0.04	4 4 8 4 1 Nil	2.73 0.98 1.53 0.45 Nil	976 5'95 5'19 8'50	2.95 8.39 4.10 3.21 3.78	51'45 69'49 54'16 43'44 46'66 64'00	20 CT
		Lalbagh Azimgunge Jungipore Lalgola Jiagunge Akhrigunj	0.03					0.00		Nil Nil Nil Nil Nil	Nil 0.03 Nil 0.09 Nil	672 717 655 846 930	4'15 4'37 4'29 3'02 4'19	58:33 63:85 57:97 51:33 64:70	45° 50°
EAST BENGAL	Chittagong	Kutubdia	*****	1.06		0.03	0.20	0.95	0°35 0°22	4 8	NII 1.82 0.73	2:93 3:98	5'54 4'68 1	127°59 100°92	197
	Chittagong Hill Tracts.	Rangmati Ruma				1.20	0.12	0.55		2	0.44	3.02	5'64 6'89	68'34	. 74
	Backergunge	Patuakhally Perozepore Burrisal Bhola	0.02 0.45	0.30			0.88 1.36 0.88 1.11	0°20 0°17 1°20 0°56	0.03	9 8 4 8	1.08 1.58 2.61 1.97	9:49 5:17 7:07 6:81	4°92 4°67 8°67 4°85	79'01 62'91 65'76 64'99	60° 76°

atement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 24th of October 1890—contd.

					1	RAINPAL	L.			To	TAL				
rological rigion.	District.	Station.	Saturday, 18th October,	Sunday, 19th October.	Monday, 20th October.	Tuesday, 21st October,	Wednesday, 22nd October.	Thursday, 23rd October.	Friday, 24th October,	Number of rainy days.	Rainfall of week.	Total rainfall since 1st of month.	Average total rain- fall from 1st of month.	Total rainfall since 15th May 1890.	Average rainfall from 15th May to date,
BENGAL		Gournaddi Bauphal	0.30				1.45 1.90	0.08		2 2	1.51 2.20	5°49 8°94	1	42.66 73.26	;
seld.	Noakholly	Nonkholly Fenny Harishpore Ramganj	0.50	0.20			2.50 0.48 1.43	1.53 0.40 0.85	0.12	3 4	4°12 1°23 2°48	10°02 4°93 4°80	5·71 5·40 F	92°58 1,100°80 65°28	103°5 101°0
	Furreedpore	Madsripore Furreedpore Goslundo	1.18			0.19	3.05 0.84	2·23 0·18 1·21	0.04	3 3 4	3.40 3.42 2.11	7.71 7.38 6:49	3°45 3°79 4°30	40.81 40.42 44.80	53°8 56°2 57°5
	Dacca	Munshigunge Dacca Naraingunge Manickgunge Joydebpore	0·11 0·20 0·33 0·67 0·32				0.09 0.10 0.10 0.00	2.70 9.22 1.60 1.95 1.67	0°09 6°32 0°18 0°67 0°95	****	3°10 2°90 2°30 3°39 3°03	4·17 6·02 3·26 7·14 5·48	4'61 3'39 3'03 3'37 P	57-78 54-54 60-71 59-62 65-39	67 5 56 9 58 5 48 4
	Hill Tipperal.	Agartola Comilla Chandpore Brahmunberia	1.50 0.75 1.03	0.10			0°60 0°78 0°24	8°46 0°70 2°30	0°13 6°12 0°45	4 4 5	2.69 2.85 4.12	7·19 5·07 5·19	4*19 8*50 5*64 4*00	• 66°22 56°73 64°46	58 6 78'2 73'2 59'5
		Ramchandra- pore Nasirnagar Daudkandi Kasba Laksham	0°87 0°30 0°89	0°77			0.48	1.05 0.50 1.40	0.19 0.40 1.02 0.02	5 2 4 2 1	6'89 0'70 3'48 0'25 1'40	8'18 1'80 4'51 0'84 3'22	9 9	75.84  34.81  29.74  51.71  68.55	•
	Mymensingh	Kishorogunge Atia (Tangail) Mymensingh Jamalpore Netrokona Subornakhally Durgapore ShereporeTown Dewangans	0°36 0°55 2°12 0°45 0°42 0°19	0.75			010	0.65 0.23 0.08 0.94	1°25 1°11 8°15 0°20 1°65 0°22 0°60 0°14	3 3 5 2 3 2 3 2 Nil	1'90 1'99 3'79 2'32 3'37 0'67 1'12 0'33 Nil	6°10 8°95 8°48 10°29 10°92 6°86 12°03 9°48 11°01	4'76 4'38 4'78 4'25 5'16 P	68'87 55'81 77'60 79-16 96'54 57'88 118'27 67'41 72'90	68'2 54 0 72'1. 63'4 79'1. 9
fortr	Pubna	Pubna Serajgunge	0.16				0.03	0°16 0°04	0.58 0.05	4 3	0.10	4°14 7°10	4°18 3°66	46°08 62°60	53.9
ENGAL.	Bogra	Sherepore Nowkhilla Bogra Panenbibi	0°51 0°15					0.02	0.11	1 2 2 Nil	0°11 0°56 0°26 Nil	10°18 10°18 12°06 13°05	3'96 4'84 3'28 4'25	77:27 66:42 79:24 91:46	57.0 52.9 59.4 55.2
	Rajshahye	Beauleah Nattore Naogaon Laipore	0.65		==		==	0°04 0°06	0.08	Nil 8 1 1 Nil	Nil 0'77 0'06 0'48 Nil	10:31 9:93 9:68 8:66 12:19	3'84 3'80 2'01 P	71*22 87*22 66*15 52*38 47*26	51.6 53.2 51.5
	Maldah	Manda Maldab Chanchal Gajoi			===					Nil Nil Nil Nil	Nil Nil Nil	6.87 8.33 6.52 13.10	3*27 2*49 P	64.62 59.62 84.40 62.54	49.7 55.4 9
	Dinagepore	Mohadebpore Churamon Raigunge Dinagepore . Raloorghat	0.09							Nil Nil Nil 1 Nil	Nil Nil Nil 0:05 Nil Nil	8.51 9.78 13.77 14.78 10.39 17.31	8:00 2:36 3:65 8:50 8:33 P	67:94 80:28 92:75 86:80 81:01	55 8 51 9 57 3 61 7 51 8
	Rungpore	Thakoorgaon Banwanigungu (Gyabanda) Rungpore Kurigram Bagdogra	0.20							Nil 1 Nil	0.20 0.04 Nil	20°90 19°91 17°67	4'41 4 08 4'18	123'70 96'52 95'59	61°2: 72°7: 72°8:
		(Nilphamari). Ulipore				===				Nil Nil Nil	Nil Nil Nil	15°37 17°78	4'30 9	111°28 97°52	115.0
	Julpigoree	Julpikoree Alepore Docar Fallacotta Debiganj Bhagatpore								Nil Nil Nil	Nil Nil Nil	14°27 16°59 13°22	9 9	187'47 146'30 115',0 182'39	
	Cooch Behar., Darjeeling Hill.	(Nagrakatta) Dinhatta Cooch Behar Mickilgunge Matabhanga Buxa Silliguri Darjeelink	0°10 0°04							Nil Nil Nil Nil 1 Nil 1	Nil Nil Nil 0 10 0 04 Nil 0 12 0 68	15°24 16°98 12°49 13°01 14°14 19°69 13°36 10°68 12°44	4'72 4'50 8'60 5'97 8'26 4'15 3'85 2'39	128'95 169'37 146'35 171'61 209'65 178'31 150'32 123'00	94-00 116-16 109-44 111-54 185-74 101-80 108-98 76-70
er Brhar	Purneah	Kurseong  Kurseong  Kurseong  Arrareah  Purueah  Gondwara	0.40		0.04					Nil Nil Nil Nil	0°40 Nil Nil Nil Nil	13'01 13'32 5'43 6'68	2°50 2°79 2°91 9	192'78 105'38 83'78 89'36	68*77 62*36 59*86 7
	North Bhagul- por	Balarampore Maniari Kaliaganj Maddapore Soopool Protabganj								Nil Nil Nil Nil Nil	NII NII NII NII NII	7'40 8'23 1'50 2'56	3,19 3,20 5,	63:95 118:55 61:61 63:21 49:30	48°16 46°85
	Durbhunga	Tajpore Durbnungs Madhubani	0.05							Nu Nu Nu Nu	Nil 0'02 Nil Nil	0°78 2°87 2°09 1°84	2.55 2.38 1.98	51.70 58.56 62.61 52.58	41.71 41.44 43.57 9
	Mozufferpore	Boshera Sitamarhi Mozufferpore ilappore Para	0.53							Nil Nil Nil Nil	Nil Nil 0'23 Nil	2.61 1.56 1.19 6.00	2:34 2:52 3:51	82'96 56'13 48'60, 70'81 44'79	42,39 43,63 4,67 7
		Mahus Siukar Pupri	0'34							Nil Nil	0°84 Nil Nil	0.76 4.20 1.84	, b	50'19	•

Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 24th of October 1890-could

	Carl C		75 S S S		R	AINPAL	c	1		Тот	AL				
Mateorological Division.	District.	Station.	Saturday, 18th October.	Sinday, 19th October.	Monday, 20th October.	Tuesday, 21st October.	Wednesday.	Thursday, 23rd. October.	Friday, 24th October.	Number of rainy days.	Rainfall of week,	Total rain- fall since 1st of month.	Average total rain- fall from 1st of month,	Total rainfall since 15th May 1890.	Ave rai from Ma
NORTH BEHAR —concluded.	Chumparun,	Motihari Bettiah Bagaha Burhurwa	0°28 0°05					==		1 ND 1	0.5 0.02 Nil 0.02	6:46 4:89 2:12	3°25 3°40 P	72:06 64:89 58:36	
	Sarun	Gopalgunge Sewan Chuprah							*****	Nil Nil Nil	Nil Nil Nil 6'22	1.67 0.81 1.95 1.80	4'96 3'28 2'94 2'84	52:67 59:84 48:27	
SOUTH BRITAR	Shahabad.	Buxar Dehree Bhaboeah Sasseram Arrah Mohaniah		0.32						Nil Nil Nil Nil	Nil Nil Nil 0'12 Nil	0°38 0°31 0°94 3°29	2·76 2·69 2·88 2·71	52'47 43'14 41'11 44'19 66'96	
	Gya	Aurungabad Gya Nowadah Jehanabad Arwal Daudnagar		0.04						Nil Nil Nil Nil Nil Nil	Nil Nil Nil 0°04 Nil Nil	0°51 0°34 0°43 0°42	2:54 1:76 2:29 3:14	59°49 60°04 54°84 58°35	
		Sherrghati Rajauli PakriBarawan						===		Nil Nil Nil	Nil Nil Nil	1.67 0.80 2.97	1	36'81 45'60 54'24	
	Patna	Patna Diunpore Behar Barrh Bickram Hilsa		0.55						Nil Nil Nil Nil Nil	Nil Nil Nil 0.55 Nil	1'02 1'97 1'11 1'25 1'38 1'07	2:65 2:57 2:43 2:84 ?	50°02 52°13 46°95 43°25 58°35 50°24	
	Monghyr	Begooserai Monghyr Jamui Gogri Sheikpura								Nil Nil Nil Nil Nil	Nil Nil Nil Nil	2°26 2°36 2°41 4'34 1°97	2:26 2:54 2:14	44*29 54*84 60*22 76*44 47*76	
	South Bhagul- pore.									Nil Nil Nil Nil	Nil Nil Nil	8'68 5'77	2.69 2.69 9	59°77 42°11 62°06	
	Sonthal Pergunnahs.	Rajmehal Godda Pakour Nya Doomka Deoghur Jamtara Mohasama		0'14				0.09		Nil Nil Nil Nil Nil Nil Nil	Nil Nil 0°23 Nil Nil Nil Nil Nil	8°59 5°66 12°19 12°24 4°18 18°25 3°28	2:40 2:54 3:95 3:79 5:50 2:57 ?	56°86 50°75 74°16 24°00 46°48 74°28 48°81	
CHUTTA NAG-	Hazaribagh	Pachamba (Giridi).								Nil Nil	Nil	3.08	2·55 2·69	55°35 49°95	
	Les I	Hazaribagh Semtagurah Mahudi Hilis Jhoomra Hills Barhi Chatra Karagdeha Ramghar								Nii Nii Nii Nii Nii Nii Nii	NII NII NII NII NII NII	1°53 0°70 1°90 3°00 2°05 5°89 2°53	2.83 2.41 2.56 2.56 2.56	56'80 50'24 47'08 57'34 50'24	8 8
	Loharduggs	Lohardugga Ranchi Palamow Silli Balumat Hosseinabad								Nil Nil Nil Nil Nil	Nil Nil Nil Nil Nil	1.78 2.54 0.59 5.40 1.29 Nil Nil	2:20 2:37 2:24 ?	53°19 43°57 44°27 43°50 45°02 41°75 38°30	
	Singbhoom	Chyebassa Chakradhar- pore.			·					Nil Nil Nil	Nil Nil Nil	1.78 1.70	2'24	33.94 24.83	Sept.
	Manbhoom	Ghatsilla Baharagura Purulis								Nil Nil Nil Nil	Nil Nil	3.08	2:50	51'46 44'22 38'63	6
		Gobindpore  Raghunath- pore.  Barrabkoom  Jhaldo	===							NII NII NII NII	Nil Nil Nil	3:57 3:34 1:94 8:51	3.04	58 63 61 86 44 15 64 71 50 18	

Baplanation. -.....indicate that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the are wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 28th October 1890.

SUMMARY OF THE METEUROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING FRIDAY, THE 24TH OCTOBER 1890.

In last week's report it was noted that conditions at the end of the week were favourable to the formation of a cyclonic storm in the Bay. Subsequent events have proved that a storm was then in the course of formation in the usual birthp'ace of these whirls in October -to the south-west of the Andamans. The storm was a very small one, and its centre advanced very much closer to the Burmah coast than is usual with storms advancing up the Bay. On Saturday 18th, Sunday and Monday morning, no telegrams were received from Diamond Island, and it illustrates the extreme importance of that station from a storm-warning point of view, that the telegram received on Monday afternoon about 3-30 immediately indicated the passage of a storm of which the ordinary coast stations (Bassein observations being wanting) gave no indications other than might be characterized as "suspicious." The whirl on Monday at 8 A.M. was approaching the Burmah coast, but curved off and advanced in a northwesterly direction and apparently made for the coast of the Circars, as is usual with October storms. There was, however, a trough of low pressure extending from Mymensingh, through Dacca and Burrisal, out into the Bay, and as the barometer was very high behind the Circars coast, the whirl was forced up in the direction of the Sunderbuns, which it crossed on the morning of 22nd at 10 A.M.

Pressure at the beginning of the week was relatively highest in Madras and lowest in North Bengal. A very rapid fall took place on Saturday over the whole eastern and northern area, and a brisk fall at all places in the south-east except Negapatam and Trincomalee. This was followed by a series of very small irregular changes on Sunday and a rapid recovery on Monday, especially in Burmah, behind the depression. This feature was still more pronounced on Tuesday as the depression advanced up the Bay, and became the dominant factor of the weather in Bengal. On Wednesday morning it advanced across the coast, the lowest pressure recorded being 29.900" at Saugor Island. On Thursday morning it wasbetween Jessore and Dacca, lowest pressure recorded being 29.858" at Furreedpore and subsequently it began to fill up rapidly, spreading itself out along a low-pressure area extending from Jalpaiguri, through Dhubri, up into Silchar. Whilst the recovery was taking place behind the depression in Bengal, the barometer was falling slowly in Madras, and the

distribution approximating more nearly to the ordinary cold weather conditions.

Temperature has been governed to a very great extent by the depression, and, as might be expected, was below the normal of the season. This defect, however, was due almost entirely to low maximums, for minimums were in few cases below the normal, and at the end of the week were decidedly above the average all over the province. All this was due of course to the unusually damp weather.

Rainfall has been reported from few stations except those in the immediate path of the small storm. The stations chiefly affected were Noakholly (4.27"), Mymensingh (3.77"), Furreedpore (3.47"), and Jessore, Dacca, Commilla, and Burrisal, each of which received over two inches. The only very heavy fall in twenty-four hours was 3.07" at Mymensing

on the 23rd.

Humidity and cloud proportion were very high for the season at the beginning of the

week, but rapidly decreasing at the end.

Weather during the week was entirely subject to the depression. It has cleared the air, passed away and lett conditions very favourable for an early cold season.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 24th of October 1890 :-

			TEMP	ERATU	RE.					R	AINPA	LL.				
	week.	week.	Averag	res for	week.	above or week.		of wee	k	R	siny de	ys.	Since of me			15th 1890.
MBTROROLOGICAL DIVISIONS.	Highest observed during	Lowest observed during	Of highest of each day.	Of lowest of each day.	Of mean for each day.	Average mean of week a below normal mean of w	Ауегаде.	Normal average.	Variation.	Average number in week,	Normal average num- ber in week,	Variation.	Average.	Normal average.	Average.	Normal average.
Ortsua	89.7	69.9	86'8	73'1	80.0	-1'3	0.36	1 21	-0.95	07	1.6	-0.9	7.53	5.08	60.10	49'85
South-Wes Bengal	89:3	70'4	84.8	78'5	79.2	-1.2	0.67	0.49	+0.17	1.3	1.0	+0'3	7.82	3.60	56 41	50.53
Sast Bengal	88.1	69.6	84'1	73.4	78'7	-1.2	2.20	0.22	+1:93	3.3	12	+2.1	6.67	4'54	71'34	71'68
North Bengal	86 8	63'6	83'8	71'0	77.4	-1.8	0.13	0.59	-0 16	0.7	0 7	0	12'29	3.80	95'18	67'82
North Bohar	67-7	66'8	84'3	70'6	77:6	-1.3	0.04	0.08	-0.04	0.3	0.4	0:1	3:59	2 94	64.45	47:57
South Bonar	88'4	65.0	84'9	69'6	77'3	-1'4	0.03	0.53	-0.50	0.5	0.2	,-0'3	3'65	2 69	54'47	42.38
Chutia Nagpur	81.9*	59.9*	80.5.	62.6*	71'4"	-2.9*	NII	0.58	-0 26	0.0	0.8	- 0.8	1'97	2'52	45'59	47'07
Assam	93.0	66.9	84'3	71'5	77'9	-0.8	Sale !	10		THE ST		Section.	Mary 12			

\* Chyebassa not included.

J. H. GILLILAND,

METROROLOGICAL OFFICE, BENGAL; The 28th October 1890.

Results of the Meteorological Observations taken at the Alipore Observatory from 19th to 25th October 1890.

		Page 1	s of	barometer		Гемрив	ATURE.	livo.		HYGROM	ETRY.		WIND.			
Month.	Date.	Maximum in sun.	Number of hours bright sunshine.	Mean pressure baro at 82° Fair.	Mean.	Maximum,	Range.	Minimum.	Mean wet builb.	Vapour pressure,	Dew point.	Humidity.	Prevailing direction.	Miles recorded.	Rain.	WEATHER,
		0	704	Inches.	0	0	0	0	0	Inches	0	%	THE GOTTOGEN COMM	ores.	Inches,	
Oct.	19th	144:8	5-6	29.850	79.0	84.8	11.1	73.2	75.9	0.855	74.5	87	Calm and variable	18	0.02	Partially cloudy d, =, a.
,,	20th	140.4	1.2	•903	78.1	81.6	9.8	71.8	75.9	-869	75-0	90	Calm and variable	16	1.22	Chiefly cloudy
,,	21st	143-2	4.6	-917	78.3	83.5	11.1	72.4	74 3	-800	72.5	83	N and calm	57	Nil	Chiefly cloudy
,,	22nd	104-3	Nil	856	77.8	79.1	5.4	73.7	74.4	-815	73.1	84	NNW and N	154	0.03	Chiefly cloudy
,,	23rd	149.4	9.9	-861	79-8	85.5	12.0	78:5	75.6	-837	73.9	84	NW and NNW	83	Nil	Chiefly clear
n	24tb	144:8	10.4	-900	79-2	85.7	12.5	73-2	75 9	-850	74.8	86	NNW and calm	32		Chiefly clear
"	25th	140 4	10.3	-930	77/2	84.4	14.2	70.2	72:5	.785	70.0	80	NNW and calm	45	,,	Clear, _, =

The mean pressure of the seven days  The average pressure of the corresponding period for 24 years, SG.'s Office  The total number of hours of bright sunshine  The mean temperature of the seven days  The average temperature of the corresponding period for 24 years, SG.'s Office  The extreme variation of temperature  The maximum temperature  The highest velocity of the wind in one hour  The highest pressure of wind on one square foot  The mean relative humidity  The average relative humidity of the corresponding period for 24 years, SG.'s  Office  The total fall of rain from 19th to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890  The total fall from 1st January to 25th October 1890	A STATE OF THE PROPERTY OF THE	HAT AND A DOMESTIC		CHICKEN A ST	
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The total number of hours of bright sunshine  The maximum possible number of hours of sunshine  The mean temperature of the seven days	The average pressure of the corresponding period for	r 24 years,	SG.'s Office	•••	29.862
The mean temperature of the seven days	AVENUA-MANUELLE VICTORIA NULL ARROY POR ARROYA				Hours.
The mean temperature of the seven days	The total number of hours of bright sunshine				42.0
The mean temperature of the seven days				Mark Cont.	80.2
The average temperature of the corresponding period for 24 years, SG.'s Office The extreme variation of temperature	the maximum possible number of nours of substitute	Sad Mar Towns			0
The average temperature of the corresponding period for 24 years, SG.'s Office The extreme variation of temperature	The mean temperature of the seven days			<b>自卫发展</b>	78:4
The extreme variation of temperature	the mean temperature of the seven days	1 for 94 mar	** 8 - G 'e O	en a	71 10 2 2 3 15 6
The highest velocity of the wind in one hour	the average temperature of the corresponding period				207307
The highest velocity of the wind in one hour		100	A PARTY		
The highest velocity of the wind in one hour	The maximum temperature		Link) Trib	***	CONTRACTOR AND A
The highest pressure of wind on one square foot  The mean relative humidity  The average relative humidity of the corresponding period for 24 years, SG.'s  Office  The total fall of rain from 19th to 25th October 1890  The average fall of the corresponding period for 24 years, SG.'s Office  The total fall from 1st January to 25th October 1890  61:2		Contract State	mayor, with the	A Transfer	Miles
The highest pressure of wind on one square foot	The highest velocity of the wind in one hour	1	DOWNERS THE	***	12
The mean relative humidity					lbs.
The mean relative humidity	The highest pressure of wind on one square foot				?
The average relative humidity of the corresponding period for 24 years, SG.'s Office	11 SEL MENTA BUTTUL MEAN ON DELING MENT				0/
The average relative humidity of the corresponding period for 24 years, SG.'s Office	The meen relative humidity				8
Office		namind for	24 WOODS S -	G ?a	We all the
The total fall of rain from 19th to 25th October 1890 1.2 The average fall of the corresponding period for 24 years, SG.'s Office 1.4 The total fall from 1st January to 25th October 1890 61.2		berrog for	or years, o	u	77
The total fall of rain from 19th to 25th October 1890 1.2 The average fall of the corresponding period for 24 years, SG.'s Office 1.4 The total fall from 1st January to 25th October 1890 61.2	Omce	***	***		
The average fall of the corresponding period for 24 years, SG.'s Office 1-4 The total fall from 1st January to 25th October 1890 61-2					Inche
The total fall from 1st January to 25th October 1890 61-2	The total fall of rain from 19th to 25th October 18	90			1.27
The total fall from 1st January to 25th October 1890 61-2	The average fall of the corresponding period for 24	years, SG.	's Office		1.40
			10.00	S. Light wa	61.24
			's Office		63.68

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph. The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary showers; a, dew; =, fog.

J. H. GILLILAND,

For Meteorological Reporter to the Goot. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA; Calcutta, the 27th October 1896.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 19th to 25th October 1890.

		o A.M.			TEMP	RRATURE.			В	YGROMETRY		hours.
" " 2	Date.	Pressure at 10 corrected and racto 32° Fahr.	Daily mean.	Maximum.	Range,	Minimum.	Dry bulb at 10	Wet bulb at 10 A.M.	Vapour pressure at 10 A.M.	Dew point at 10 A.M.	Humidity at 10	Rainfall past 24 bo
	19th 20th 21st 22nd 28rd 24th 25th	Inches. 29 951 975 930 879 912 961 30 008	80·3 79·8 78·9 78·6 79·6 80·8 78·6	85 9 83 9 84 9 82 9 86 4 87 2 86 4	11:3 8:3 12:1 8:6 13:6 12:9 15:6	74·6 75·6 72·8 74·3 72·8 74·3 70·8	83 4 81 8 80 4 76 8 82 6 83 6 82 6	77·3 77·0 74·5 74·8 76·5 77·0 69·6	*856 *864 *772 *837 *832 *840 *550	74·5 74·8 71·5 73·9 73·7 74·0 61·6	75 80 74 91 75 78 49	0.80 0.07

				Inches	
The mean 10 A.M. pressure of the seven days			10	29.945	
The mean temperature of the seven days		LINE TO S		79.5	
The extreme variation of temperature		***	***	16.4	
The maximum temperature			***	87-2	
m - 10 - leting humidity of the se	J			74	
The mean 10 A.M. relative humidity of the se	ven days	***	***	Inches.	
The total fall of rain from 19th to 25th Octo	her 1890		ACCOMPANY.	0.87	

The total fall of rain from 19th to 25th October 1890 ... 0.87

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,

For Meteorological Reporter to the Goot. of India.

METEOROLOGICAL OFFICE, INDIA; The 27th October 1890.

#### Weekly Return of Traffic Receipts on Indian Railways.

#### BENGAL AND NORTH-WESTERN AND TIRHOOT RAILWAYS.

COMBINED SYSTEM.

Approximate Return of Traffic for week ended 11th October 1890, on 691 miles open.

	COACHING	TRAPPIC.		AND MINERAL PPIC.	Other earnings (estimated),	Total	TRAPPIO	TRAIN-MII	RS RUI
	Number of passengers.	Coaching receipts,	Weight carried.	Receipts.	including steam-boat earnings.	earnings.	Coaching.	Merchan- dise.	Total
		Rs.	MDs.	Rs.	Rs.	Rs.			
Total traffic for the week (on 691 miles open)	77,370 111'97	28,800 41°68	1,63,760 236'99	33,800 48'91	6,420 9°29	69,020	12,250	11,730	23,08
For previous 13 weeks of half- year	1,003,900	3,89,459	34,26,764	4,07,980	88,077	8,85,516	164,355	154,622	318,97
Total for 14 weeks	1,081,270	4,18,259	35,90,524	4,41,780	*94,497	9,54,536	176,605	166,858	342,95
COMPARISON.  Audited figures.  Fotal for corresponding week of	Grand.		-						
previous year	68,839	25,258	2,45,907	19,847	5,622	50,727	10,704	11,214	21,91
open otal to corresponding date of	106.07	88.92	378-90	30:58	8.66	78.16		*****	Heres
previous year	1,078,221	3,94,509	38,43,890	4,51,963	1,18,352	9,64,824	166,400	189,193	355,885

<sup>\*</sup> Steam-boat earnings for the week, Rs. 4,980. Ditto ditto to date, ,, 71,490.

#### FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal and North-Western and Tirhoot Ruilways.

	TS POR WHEE PO OCTOBRE 1			TS POR WEEK H OCTOBER 1		TOTAL RECEIPTS FROM 18T APRIL 1890 TO 11TH OCTOBER 1890.  TOTAL RECEIPTS FROM 18 APRIL 1889 TO 12TH OCTOBER 1889,			L 1890 TO 11TH APRIL 1889 TO				Total
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.		Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked,	Total receipts.	Per mile worked per week,	lucrease in 1890-91.	decrease is 1890-91,
	Rs.	Rs.		Rs.	Ra.		Rs.	Rs.		Rs.	Rs.	Re,	Re.
691	69,020	99.88	649	50,727	78'16	671	22,78,216	121*88	649	22,80,477	126'14		2,561

N.B.—Earnings of B. and N.-W. Section. Earnings of Tirhoot Section

Data mage of 11, and	21,-11	Rs.	muniting or	Rs.
Coaching Goods Other earnings	**	13,010 13,580 (3,690		15,790 20,220 2,730
Total		80,280		38,740

DARJE	ELING-HI	MALAYA	N RAILW	AY COM	PANY, LI	MITED.	Rs.
Approximate e Corresponding			4th Octob	er 1890	*::		14,028 16,210
Decre	ase						2,182
Receipts per n Corresponding			October 1	890	<b>:</b>	:	Rs. A. P. 275 0 11 317 18 5
Decre	ase	- 1	•	-			42 12 6
Receipts from Corresponding			1890			=	1,29,390 1,56,210
Decre	ase	47			•		26,820

<sup>\*</sup> Steam-boat earnings for the week, Rs. 50. Ditto ditto to date ,, 3,510.



# The Calcutta Gazette.

WEDNESDAY, NOVEMBER 5, 1890.

#### OFFICIAL PAPERS.

Non-Subscribers to the Gazette may receive the Supplement separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.

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# RESOLUTION ON THE GENERAL ADMINISTRATION REPORT OF THE PRESIDENCY DIVISION FOR THE YEAR 1889-90.

#### GENERAL DEPARTMENT-MISCELLANEOUS.

Darjeeling, the 21st October, 1890.

RESOLUTION.

READ-

The General Administration Report of the Presidency Division for the year 1889-90.

Mr. Smith continued in charge of the Division during the year, and has again submitted a full and excellent report. There is a curious omission of the district of Moorshedabad in the third paragraph, which is not explained.

2. The Commissioner's tour was well planned, and the Lieutenant-Governor is pleased to observe that, with a single exception, all district officers completed useful tours of the requisite length. In Jessore district officers, in consequence of the indigo disturbances, were out altogether for 114 days. In Moorshedabad the Collector was out for 104 days, part of his time being devoted to the flood caused by the breach of the Rampal embankment and to the consequent distress. The Collectors of Nuddea and Khulna were out for 106 and 93 days respectively. The Lieutenant-Governor is disposed to agree with the Commissioner that, though the rapid succession of district officers in the 24-Pergunnahs affords some excuse, the period of 60 days especially fixed for that district should have been completed.

3. There was a paucity of rain at the beginning of the year; later on there were local floods in Moorshedabad and Nuddea, but the chief and most widely-spread characteristic of the season was the unusually late rain in November, which damaged the cold-weather crops and in some places also the amun harvest. In the result the harvests generally were slightly better than those of the preceding year.

4. Judging from the recorded mortality, the past year was more healthy than either of the two preceding years. Jessore and Khulna show worse on paper, but it is not known how far this is due to improved registration. The

how far this is due to improved registration. The other districts show improvement. There was an increase of cholera in Nuddea and Moorshedabad, attributed to the want of rain in the early months. Fever, on the other hand, was not so fatal. Owing to the amalgamation during the year of a considerable portion of the Suburbs with the town of Calcutta, no useful comparison can be made in the 24-Pergunnahs. There was an outbreak of small-pox in that district in spite of a considerable extension of vaccination, 335 deaths from this cause having occurred, as against 49 and 23 in the two preceding years. It is satisfactory, however, to note that the practice of inoculation appears to have been stamped out. The scanty harvests of 1888 were followed by high prices in 1889, and there was some pressure in the Diamond Harbour sub-division of the 24-Pergunnahs, and in the Lalbagh and Jungipore sub-divisions of Moorshedabad, which necessitated relief operations until a good aus and jute crop put an end to further anxiety. There was also some scarcity in the Magurah and Bongong sub-divisions of Jessore; but as to the remainder of the Division the Commissioner writes that "the condition of the cultivating classes was one of fair prosperity, as they were able to make up for the deficiency of the crops by the high prices which prevailed." He adds, however: "The labouring and middle classes, dependent on service and fixed income, suffered on account of the high prices of food-grains. Living in a state of transition, the latter class have not only to keep up old customs and appearances, but also have to cope with the wants of the day, and few of them have sufficient strength of character to resist and set themselves free from old trammels."

The wages of labour were not affected by fluctuations in price, and remained almost identically the same as in the two preceding years.

5. As in the previous year, 46 mills, presses and factories were at work, giving employment to nearly 57,000 persons in the Manufactures and trade. manufacture of cotton-twist and yarn, gunny-bags and cloth, sugar, paper, silk, ice, shell-lac and lac-dye. The bone-crushing factory at Tengra was closed, but this is counterbalanced by a saltpetre refinery at Balliaghatta. Owing to the state of the market the outturn of jute was less than in 1888-89. Cotton and other industries appear to have flourished, and especially indigo. The outturn of indigo in Nuddea was 6,650 maunds, valued at Rs. 11,52,806; in Jessore 2,695 maunds, valued at Rs. 4,54,488; and in Moorshedabad 4,358 maunds, valued at Rs. 8,33,530, the outturn and value being in every case considerably in excess of those of the previous year, though lower prices ruled in the market. The important sugar industries were also generally prosperous, though imported sugar is usurping the place of the local article in Khulna. In Moorshedabad the year was favourable to silk, both as to outturn and value. The total weight of traffic registered between the mofussil and Calcutta shows a decline of about 93 lakhs of maunds, while the returns of trade between Calcutta and the mofussil are nearly stationary. The import of rice into Calcutta was less by nearly 41 lakhs of maunds, and the export greater by over 3 lakhs-facts which afford a useful commentary on the ready adjustment between trade and the varying conditions of different seasons. There was a further decrease this year in the traffic over the Nuddea river, and the Lieutenant-Governor would have been glad of some explanation. The traffic in Khulna is still carried principally

by river, though the railway has appropriated a portion of the jute trade of Eastern Bengal.

6. There was an increase of cognizable crime, chiefly under the head of house-breaking and other offences against property, Police and crime. attributed to the high prices current during the year. In other respects the returns do not call for any criticism beyond the remarks made by the Commissioner. With regard to the conduct of the police, the Commissioner quotes with approval the following observations by the Magistrate of the 24-Pergunnahs:

"The police of the district cannot, as a body, be deemed efficient, and are in no way superior to the men found in districts more remote from the metropolis. There are a few smart and conscientious officers, but, on the whole, the standard of intelligence and honesty is low. Better materials cannot be procured while the pay of the lower ranks continues on its present low scale, and reward for thoroughly good service does not go beyond the rank of Inspector. The important work of investigation of criminal cases is as a rule done only fairly, Inspector. The important work of investigation of criminal cases is as a rule done only railry, and there is a lack of energy, patience, and detective capacity which causes the failure of many serious cases."

7. The percentage of collections of the land revenue on the gross demand was 95.69, the total collected being Rs. 51,58,542. Revenue. There was a decrease in the excise revenue, chiefly due to the abolition of the outstill system in the 24-Pergunnahs and Nuddea, and the consequent decreased consumption of country liquor, to which the closing of several shops by order of the Commissioner of Excise also contributed. There was, however, an increase in the consumption of rum in Calcutta, no change having been made in the rate of duty, which stands at Rs. 4 per gallon. There was a decrease in the consumption of salt in both the protected areas in the 24-Pergunnahs and Khulna, attributed partly to illicit manufacture, partly to a smaller number of reapers having come into the district during the harvest time, and partly to a smaller number of feasts having been celebrated owing to the poor outturn of the harvest. The gross revenue from stamps amounted to Rs. 39,46,935, and the net increase, taking receipts and charges, amounted to Rs. 1,27,623. The net demand of income-tax was Rs. 21,33,988, or an increase of 7.5 per cent. on the demand of last year. The collections were 89.6 per cent. as against 90.9, the worst result coming from Jessore, where the Deputy Collector in charge did not pay sufficient attention to his duties.

The following statistics, given by the Commissioner, are interesting:-"The area of the Presidency Division is 12,021 Education. square miles, and it has a population of 7,771,693 souls, of whom 3,895,365 are males and 3,876,328 females. Calculating at 15 per cent. of the total number, the school-going population would consist of 584,304 boys and 581,449 girls. The numbers attending the schools being 180,592 boys and 11,650 girls, we have of all boys of a school-going age 1 in 3.2 and of girls 1 in 49.9 only at school. The total number of schools on returns being 5,913, there is one school for a little over two square miles of area." Making allowance for the transfer from the 24-Pergunnahs of part of the Suburbs of Calcutta, there was still a slight decrease in the number of schools and pupils, extending to the number of girls' schools and of girls under instruction and to the number of Mahomedan pupils. It is difficult to account for such retrogression in the Presidency Division.

District and Local Boards and 9. Mr. Smith writes:—

"From what I have seen, it seems to me that, on the whole, the system of local self-government has continued to work smoothly and with fair success."

With regard to municipalities, the transfer of jurisdiction in the 24-Pergunnahs has been already alluded to, and was noticed in the Resolution last year. The Commissioner observes:-

"The attendance of Commissioners at meetings has been on the whole fair, and they have taken interest in the administration of the municipalities under their charge."

In another passage the Commissioner has a word to say in favour of Ratepayers Associations, which "display considerable activity in criticising the proceedings of Municipal Commissioners, their Chairmen and Vice Chairmen, and serve as a check apon irregular proceedings and extravagant expenditure of

public money." Criticism is wholesome, but in unintelligent hands is apt to degenerate into obstruction. The Lieutenant-Governor is pleased to observe that there are no complaints in the Presidency Division on this score.

10. The Commissioner remarks:-Public feeling and the Public Press.

"Public opinion on questions of general interest is chiefly confined to the educated classes living in towns, and it is formed and guided by the Calcutta press, which has a large circulation in the districts of this Division. Municipal discussions, which are not uncommon, excite much feeling and discussion, but they are purely of local interest and attract no attention beyond the towns concerned. The masses of the people only interest themselves in such matters as concern them. To matters of general interest they are perfectly indifferent."

Rumour might carry to mofussil villages the news of the visit of an English Prince and Heir-Apparent, or of a meeting of Congress at Bombay, but to the majority such occurrences would appear remote and indistinct, though they might have a passing effect on the imagination. Of local events the indigo disputes in Jessore have perhaps received a larger share of public attention than any other. In the beginning there were two centres of discontent in the district, but it was some time before the quarrel reached the acute stage and attracted general notice. This happened when the ryots had recourse to those tactics of violence which are always characteristic of agrarian disputes in this country. The public peace was so far threatened that it became necessary to make a special administrative arrangement, and Mr. Luson was placed in charge of the two sub-divisions of Jhenidah and Magurah-an arrangement which was discontinued on the transfer of Mr. Luson on promotion as district officer to Moorshedabad. The excitement culminated in two serious riot cases, which were dealt with in the Courts. The whole subject has been considered in another Department of this Government, and it is only necessary to say here that the local excitement has to a great extent subsided, and that the Lieutenant-Governor hopes that the public peace will be maintained.

11. In Nuddea, the Maharaj Kumar of Nuddea came of age and took over his estate from the Court of Wards. He is said to be taking great personal interest in its management. In Jessore, the only landlord who has been highly spoken of by the Collector is the Rajah of Naldanga. In Moorshedabad, the Nawab Bahadur, the Maharani Surnomoyee, and other zemindars received the acknowledgments of Government

for their liberality during the distress. One of the Nawab's brothers, Saliman Syed Wahid Ali Mirza Bahadur, was appointed a Municipal Commissioner and

Honorary Magistrate during the year.

12. The Lieutenant-Governor desires to acknowledge the care and success with which Mr. Smith has managed his Division during the year. Mr. Ritchie rendered excellent service in Moorshedabad, especially in connection with the inundations in August and September 1889. Mr. Forbes sustained his reputation as an energetic District Officer, and Baboo Durgagati Banerjee, as Deputy Collector of Calcutta throughout the year, is very favourably mentioned. The Commissioner's remarks on the merits of officers will be forwarded to the Appointment Department.

By order of the Lieutenant-Governor of Bengal,

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C. E. BUCKLAND,

Offg. Secretary to the Govt. of Bengal.

# RESOLUTION ON THE GENERAL ADMINISTRATION REPORT OF THE BURDWAN DIVISION FOR THE YEAR 1889-90.

#### GENERAL DEPARTMENT-MISCELLANEOUS.

Darjeeling, the 24th October, 1890.

RESOLUTION.

READ-

THE General Administration Report of the Burdwan Division for the year 1889-90.

The Division was in the charge of Mr. Clay for eight months, of Mr. Alexander for three months, and for the remaining month of the year of Messrs. Buckland and Toynbee. Although Mr. Toynbee took charge just before the close of the year, he is well acquainted with the Division and has made his report full and interesting.

2. The Commissioner's tour extended to sixty days, in the course of which he inspected all the district offices. Only one sub-divisional office and treasury, however, were inspected, but the Commissioner hopes to be able to inspect them all during the current year. All the Sub-divisional Officers were on tour for the prescribed period of 90 days. Mr. Grant in Beerbhoom and Mr. Tayler in Bankoora, however, were out for only 87 and 85 days respectively; and in Midnapore, owing to the change of officers and other causes, the total touring done amounted to only 66 days. As regards Howrah, the Lieutenant-Governor accepts the Commissioner's view that Mr. Currie's tour of 60 days was sufficient in view of the size of the district.

Weather and crop. Weather and crop. Weather and crop. Weather and crop. Weather and crop. Weather and crop. Weather and crop. Unevenly distributed, and consequently the rice crops are reported to have averaged only 13·1 annas. It seems doubtful however, from an examination of the figures, whether the rule that the average crop is to be taken as 16 annas, which has been misunderstood elsewhere, has been properly applied in all the districts, and if so, the crops throughout the Division must probably be taken as nearly average. In addition to this the prices obtained were exceptionally high, and the Commissioner considers that the people were fairly well off. As regards the coolies or labourers, however (who largely consist of temporary immigrants), it is stated that their wages remained almost stationary in spite of the high prices. Although the material condition of the people was good, the public health of the Division during the year was, as elsewhere, bad—fever being especially prevalent and there being also an extraordinary epidemic of influenza, which caused considerable suffering and public inconvenience, although seldom attended with fatal results.

4. The trade and manufactures of the districts were, on the whole, in a flourishing condition during the year. At the Trade and manufactures. Barakar iron works the value of pig-iron and castings turned out is reported to have been 33 per cent. greater than in the previous year, and the six firms which have iron works in Howrah are all said to have done well. As regards coal, it is stated that some new coal-pits were worked in the district of Burdwan, and that the export from Ranigunj was 1,227,990 tons as against 1,101,079 and 944,449 tons in the two preceding years. Indigo also has done well, the crop having been a good one throughout the Division and four new factories having been opened. On the other hand, it appears that the output of the Balli paper mills fell considerably below that of the two preceding years, and that the cotton industry in Burdwan and the silk industry in Bankoora are declining. In Beerbhoom, however, the statistics furnished show that silk is improving. The information regarding the Hooghly jute mills is said to be very incomplete; but, so far as could be ascertained, the operations were restricted owing to excess production. Some of the explanations regarding the export of rice are not readily intelligible. In Burdwan it is said that the export in 1889-90 decreased owing to the bad harvests of two successive years; but it is not clear how the harvest of the previous year can have affected the export of the year under review, although possibly the meaning is that a smaller area was sown with rice. In Bankoora it is said that the export fell off owing to the absence of any keen demand from outside; but the keenness

of the demand is measured by the price offered, and the price offered was exceptionally high; and as the crop is stated to have been much better than in the two preceding years, there must have been a considerable surplus available for exportation. The same remarks apply to Beerbhoom, where a similar explanation is given, in spite of an 18-anna crop and high prices elsewhere. In Hooghly it is said that, owing to high prices, the trade in rice and paddy was not brisk. High prices are usually associated with brisk trade, but probably the explanation is that, owing to the poorness of the crop, only a small surplus was left for export. The continued increase in the importation of European piece-goods is satisfactory as an indication of the prosperity of the people and of the increasing variety in their wants. The only other point calling for remark under this head is the statement that in Howrah the trade in hides is decaying.

5. Of the administrative changes, the most important was the appointment of an Excise Commissioner, a change, however, which affected other Divisions as much as Burdwan. The others referred to are the abolition of the Assensole Municipality, the establishment of an independent Bench at Rampore Hât, the reduction in the members of the Midnapore District Board from 36 to 24, and the investment of three of the Honorary Magistrates of the First Hooghly General Bench with powers of a second class Magistrate to sit and try cases singly. As regards the share taken by Mahomedans in the administration, the Lieutenant-Governor is glad to observe a slight increase in the percentage employed, but at the same time he is compelled to call attention to the remark of the Commissioner, who says, with reference to the difficulty of getting qualified Mahomedan candidates:—"The moral of the matter is that the Mahomedans must bestir themselves and renew their exertions instead of crying to Government to help them to appointments for which they are not found to be equally fitted with others."

6. There was a general increase of crime during 1889, both cognizable and non-cognizable, in all the districts of the Division except Beerbhoom, where there was a decrease of one cognizable and 262 non-cognizable cases. Regarding this the Commissioner says that the increase is due chiefly to the high prices which prevailed throughout the year and is most marked in offences against property; and that this class of offence increased even in Beerbhoom, which otherwise shows a nominal decrease. This state of affairs is far from satisfactory, and, moreover, the explanation cannot be held to be sufficient, for a distinction must be drawn between high prices the result of scarcity in the Division and high prices due to increased demand outside the Division. The crops throughout the Division were much better than in the two preceding years, and it is obviously an advantage to an agricultural population to sell their produce at high prices. In this connection it is significant that there was an increase in offences against property even in Beerbhoom, where the rainfall was evenly distributed and the rice crop was an 18-anna one. The remarks of the Commissioner on the rural police and on the success of Mr. Munro, District Superintendent of Police of Midnapore, in dealing with them are interesting and will be communicated to the Judicial (Police) Department for disposal.

7. Under the head of Criminal Justice the Commissioner is able to give, the Lieutenant-Governor is glad to observe, a favourable and encouraging account of the work done by the Benches of Honorary Magistrates and of the extension of the system. Under this head also he makes the following remarks on the subject of criminal fines:—

"The subject of the realization of criminal fines is, I think, one which deserves more aftention than it ordinarily receives at the hands of Magistrates. There is a very large outstanding balance of fines unrealized in this Division, and steps have recently been taken to write off all sums found to be irrecoverable after repeated attempts. This balance was Rs. 35,274 on the 31st March 1890. In this connection the quarterly examination of the thana fine registers prescribed by the fine rules is a most important duty, which should not be delegated as a matter of course to Subordinate Magistrates. If, for the purpose of this examination, the Court Sub-Inspector were made to give a detailed list of the fines outstanding in his books (thana by thana), a great impetus would, I think, be given to the police in this important branch of their work. Subordinate Magistrates who are in the habit of giving wholly inadequate sentences of imprisonment often impose fines which are quite beyond the

present or future possible means of the accused. The enquiries periodically made as to the assets of such persons not only needlessly irritate and disgrace them but also impose a useless and hopeless task upon the police."

These remarks will be communicated for disposal to the Judicial Depart-

ment, to which their consideration properly belongs.

8. The result of the land revenue administration was fairly satisfactory, 93.48 of the total demand being collected within the year, and the percentage of total collections on current demand being 105.34. The heaviest arrears occurred in the districts of Hooghly and Midnapore, that in the latter being due to successive bad seasons. As in the previous year, use was made of the Eden Canal for irrigation purposes and about 30,000 beeghas of rice lands were irrigated from it. As regards the Tenancy Act, it is said that no burning questions have arisen under it, that the special provisions for registering transfers of permanent tenures are gradually falling into disuse, and that the number of applications for survey and record of rights is on the increase. The only district in which the charge of wards' estates was heavy was Midnapore, and in that district it was very heavy, there being at the close of the year 15 estates under the Court, with a gross annual income of about Rs. 3,57,500.

In this connection may be noted the enormously increased extent to which the public availed themselves of the post-office for the remittance of land revenue. Against 7,890 orders covering Rs. 45,845 in 1888-89, the Postal Department issued 20,990 for remittances aggregating Rs. 1,34,654. The Commissioner adds that figures to show the working of the similar system for the payment of rent are not available, but the local officers state that it has been a partial success, in spite of the opposition of the zemindars and their

local agents.

9. There was an increase of 2.3 per cent. in the revenue from stamps and of 3.5 per cent. in that from income-tax. Regarding the latter the Commissioner remarks:—"These results are, I consider, highly creditable to the district officers generally, the more so as they were obtained without any complaints being made of harsh and inquisitorial measures with the issue of a smaller number of processes and with a percentage of only 2.1 objections on the part of the 8,466 persons assessed." On the other hand there was a falling off under Excise, due to the outstill being replaced by the sudder distillery system.

10. Under the head of Railways and other Public works may be noted

10. Under the head of Railways and other Public works may be noted the opening of the Bengal-Nagpur Railway as far as Chakhardharpur and the completion of the Damudar bridge. Under the head "Communications" the Commissioner gives figures showing the large amount spent on repairs as compared with the small expendi-

ture on original works and village roads, and remarks as follows:-

"The great difficulty of all the District Boards is the fixed and inelastic nature of their income and the large mileage of roads which they have to maintain. They are like parents with large and increasing families, but with fixed incomes. Each mile of road newly made or metalled involves a fixed charge for maintenance, and thus adds to the financial difficulties of the future. The maintenance of village roads is less expensive than that of the main lines of communication, both metalled and unmetalled; but the want of a proper establishment to supervise the work on the former is, I think, the principal reason why so little money is spent on them. The District and Local Boards hesitate to spend money on work which they cannot properly check or control, and they fear to entrust it to local agents in whose integrity and supervision they have no confidence."

Village roads, however, have this great advantage, that the land required can usually be obtained for nothing, whereas the people hesitate about giving, and usually will not give, the land and roadside lands for a road much broader than they require. In sub-divisions, the Sub-divisional Officer will almost invariably give a good account of money made over to him for village roads which he is given free liberty to spend, and in sudder sub-divisions the members of the Board should, with the assistance of the District Engineer, be able to look after the work themselves and to see that the money is properly spent.

11. In paragraph 68 et seq. of his report the Commissioner deals with the administration by District Boards of the grant for primary education. Although there was a

divisional increase both in the number of pathsalas and of boys attending them, the results cannot, on the whole, be regarded as very satisfactory, for there was a decrease both in Midnapore and in Howrah; and in the case of girls' schools, there was a decrease both of schools and scholars in Burdwan and in Howrah, while in Midnapore it is reported that four girls' schools were closed "owing to the apathy of the managers." In Bankoora, however, the administration has been much more successful and the prospects are brighter. There it is said that, whereas in 1887-88 there were nearly 49 girls' schools with 920 pupils, there were last year 121 such schools with 2,054 pupils. A great part of this increase is attributed to the establishment of separate girls' schools in the place of mixed schools. It is probable that if the Magistrate and Chairman of the District Board takes an interest in primary education and shows that he does so, the apathy of the managers will disappear; and it is to the absence of such an interest that the Lieutenant-Governor feels compelled to attribute, to some extent, the failure in this branch of the administration in the districts referred to.

12. As regards local self-government institutions the verdict of the Commissioner is on the whole favourable. He says that the working of the District and Local Boards and of the municipalities in his Division is pronounced by the district officers generally to have been successful; and he adds that the attendance of the members has generally improved, and that they have been of much use as consultative bodies. He also makes the following general remarks on the subject:—

"The successful working of local self-government institutions depends quite as much upon the character and abilities of the Chairman, Vice-Chairman, and permanent officials as a district does on its staff from the Magistrate-Collector downwards. The position of an official Chairman is altogether a stronger and more popular one than that of a non-official. The latter's every public act is regarded with distrust and suspicion: parties are formed to thwart his measures and question his executive action, and his position is by no means a bed of roses. It says much for the future of local self-government that many such difficulties have been bravely faced and overcome. The names of Baboo Lalit Mohan Sing, Vice-Chairman of the Hooghly District Board; of Baboo Siva Narain Mookerjee, Chairman of the Uttarparah Municipality; and of Baboo Nalinaksha Basu, Chairman of the Burdwan Municipality and Vice-Chairman of the District Board, whose services have recently been specially recognised by the title of Roy Bahadoor, deserve special mention in this connection.

"I would also mention Baboo Eshan Chunder Mitter, the Chairman of the Hooghly Municipality. With the exception of the Baidyabati Municipality in the Hooghly district, none of the local institutions have shown any wrong-headedness or impatience of control. On the contrary they have, as a rule, loyally accepted the advice tendered them by the officers of Government both in matters of finance and of general administration. Not the least promising feature of the present system of local self-government, and one which gives much hope for the future, is the fact that its defects are seen and fully admitted by all classes of the people. The strength of purpose and the moral courage to apply the remedy—which is the subordination of all personal and party feeling to the public good—though wanting at present, will, it is hoped, be developed gradually in the future."

13. The Commissioner remarks that the conduct of zemindars has been, on the whole, satisfactory and singles out for favourable notice Baboo Raghu Nath Panja in the district of Bankoora and the zemindars of Motiari and Ajudhya in the same district. Only one zemindar, he says, deserves specially unfavourable notice—Mohant Gopal Das of Beerbhoom, whose estates are being settled under the Tenancy Act.

14. A copy of the remarks regarding the conduct of officers will be forwarded to the Appointment Department for record. But the Lieutenant-Governor will take this opportunity of acknowledging the services rendered by Mr. H. Lee, c.s., both in Burdwan and Midnapore, which have led to his selection for an important charge elsewhere. Mr. Cooke has also done well in the Hooghly district. The Commissioner writes of his Personal Assistant, Babu Pran Kumar Das, as an excellent officer, hard-working and thoroughly reliable.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,
Offg. Secretary to the Govt. of Bengal.

# RESOLUTION ON THE TRIENNIAL REPORT OF THE SANITARY COMMISSIONER FOR BENGAL ON THE WORKING OF THE VACCINATION DEPARTMENT DURING THE THREE YEARS 1887-90.

#### MUNICIPAL DEPARTMENT-SANITATION.

Darjeeling, the 20th October 1890.

RESOLUTION.

READ-

The Triennial Report of the Sanitary Commissioner for Bengal on the working of the Vaccination Department during the three years 1887-88, 1888-89, and 1889-90.

Read also-

The annual statistical returns for 1888-89, with the brief notes accompanying them, and the report of the previous year incorporated with the Sanitary Report, together with the Resolutions recorded thereon.

This is the first occasion on which, under instructions contained in the Resolution of the Government of India, Home Department, No. 28—1579-95, dated 15th July 1887, a triennial report on the working of the Vaccination Department in Bengal has been submitted. Dr. Gregg's report, though commendably moderate in length, gives a sufficiently clear view of the working of the Department during the past three years, and the diagrams and maps which accompany it are both intelligible and instructive.

2. The system of administration of the Department remained unchanged; but during the past year the amalgamation of the Sonthal Pergunnahs Circle with the Darjeeling Circle has reduced the number of circles from eight to seven. The following table shows the number of officers and vaccinators working under

the Department during each of the three years under report: -

			INSPECTI	NG STAFF.		a Cal	•	PERATOR	s.	
		-ten-		ors,	ting	Vacci	inators.	Appre	ntices.	les al
	Superintendents	Deputy Superinten- dents.	Inspectors,	Head Vaccinators &c., &c.	Total of Inspecting Officers.	Government or paid.	Licensed.	Government or paid.	Licensed.	Total.
In Vaccination Circles \( \begin{pmatrix} 1887-88 & \dots \\ 1888-89 & \dots \\ 1889-90 & \dots \end{pmatrix} \end{pmatrix}	8 8 7	12 12 14	93 93 110	21 19 21	126 124 145	210 192 179	1,321 1,349 1,480	40 48 31	598 781 588	2,169 2,320 2,278
In municipalities and \$\begin{cases} 1887-88 \\ 1888-89 \\ \ \ 1889-90 \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			120	=		209 240 245	14 4 7	OD :	=	923 844 252
Grand Total {1887-88 1888-89 1889-90	7	19 19 14	93 93 110	21 19 21	126 124 145	419 432 424	1,335 1,353 - 1,487	40 48 31	598 731 588	2,393 2,564 2,539

3. The average annual number of operations performed during the past three years was 1,790,098, or 719 to each vaccinator employed; and the average annual percentage of persons vaccinated to the whole population was 2.9. Of the two agencies, the paid and the licensed, the former were far the more active, performing on an average 1,475 operations each to 671 of the licensed vaccinators—a result which is probably due to the fact that the people obtain their

services free and are therefore more willing to employ them.

4. The reported proportion of successful operations was in the case of primary operations 99.38 and 95.30 in vaccination circles and municipalities, dispensaries, &c., respectively, and in the case of secondary operations 34.08 and 64.04. Dr. Gregg reports that the percentage of successful secondary operations in municipalities is much too high to be correct, and that either many cases returned as secondary were in fact primary, or that the rate of success was not truly recorded. The question of the accuracy of the reported rate of success was raised by the Government of India in Mr. Lyall's letter No. 327, dated 17th October 1889, in which comment was made on the small proportion of operations checked by inspecting officers. The following table shows, however, that during each of the three years under report the number of operations checked by supervising officers of one class or another has always

exceeded 70 per cent. The Lieutenant-Governor attaches much importance to these inspections, and hopes that future years will show a larger percentage, especially on the part of Superintendents:—

		SUPERINT	endents.	DEPUTY SUPE	RINTENDENTS.	ALL OTHER INSPECTING OFFICERS.		
	Number of operations.	Number of cases inspect-	Percentage.	Number of cases inspect-	Percentage.	Number of cases,	Percentage.	
1887-88 1888-89 1889-90	 1,639,694 1,758,354 1,703,288	155,024 133,851 80,562	9°50 7°61 4°73	144,917 168,025 189,936	8'83 9'44 11'15	930,602 1,033,553 973,344	56'81 58'79 57'14	

5. Dr. Gregg dwells at some length on the very important question of the results of vaccination as shown by the number of deaths from small-pox in various areas, compared with the proportion of population in those areas protected by vaccination; and illustrates these results by several useful diagrams. The following table shows the proportion of deaths from small-pox during the last seven years in areas under vaccination compared with those not under vaccination:—

- Tablian or a street	1	Tumbe		as whi		e under		Death-rate from small-pox per mille of population.						
	1883-84.	1884-85.	1845-86,	1886-87.	1887-88,	1888-80.	1889-90.	1883-84.	1884-85.	1885-84.	1886 87.	1887-88.	1888-89,	1889,90.
Areas under vaccination	430 149	463 116	472 107	488 91	507 72	542 35	548 29	'12 '25	15 58	*06 *26	.05 .19	.04 .16	-00	716

It is noticeable that though the death-rate in protected areas is, as a rule, much lower than in those which are not under vaccination, the results of the last two years are far from satisfactory. The table shows, moreover, a marked increase in the mortality from small-pox in each of the last three years. In this connection Dr. Gregg remarks that "the protection of rural areas can never be placed on a proper footing until the Compulsory Vaccination Act in a suitably modified form be extended to them," and promises a full report on the subject, which is awaited by Government.

6. The total cost of vaccination during the three years was Rs. 4,97,833-0-11, giving a yearly average of Rs. 1,65,944-5-7. The average cost of each successful operation was one anna six pie against one anna eight pie in the three years 1884—87. It was highest in Calcutta, where each successful operation cost 15 annas 7 pie, and lowest in the Eastern Bengal

Circle, where the cost was only 7 pie.

7. The attitude of the people towards vaccination is, according to Dr. Gregg, one of passive acceptance tempered apparently by a considerable but fortunately diminishing amount of passive obstruction. The issue of lymph in tubes from the Animal Vaccination Depôt in Calcutta to the mofussil has proved a failure owing, in Dr. Gregg's opinion, rather to carelessness in storing at the depôt than to any physical causes. Dr. Gregg speaks most unfavourably of the whole working of the depôt, which is under the supervision of the Superintendent, Metropolitan Circle. It is hoped that, when the projected Darjeeling depôt is in working order, the supply of animal lymph from Darjeeling and Calcutta will be sufficient to enable the Bengal vaccine establishment to dispense with lymph obtained from the human subject.

8. The Lieutenant-Governor is glad to notice the excellent work done by Moulvie Tajamal Hossein, Deputy Superintendent of the Bhagulpore Division. The remarks made by the Sanitary Commissioner on the working of his subordinates in this Department will be communicated to the Appointment Depart-

ment for record.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON.

Secretary to the Government of Bengal.

#### DISTRICT ROAD FUND.

# GOVERNMENT OF BENGAL-PUBLIC WORKS DEPARTMENT.

Road Cess.

No. 3685R.C.

Calcutta, the 31st October 1890.

READ-

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Letter from the Accountant-General, Bengal, No. L.P., dated the 11th October 1890, submitting an abstract of receipts and expenditure of the several District Road Committees in Bengal for the quarter ending 30th June 1890.

RESOLUTION.—The Lieutenant-Governor directs that the accounts of the receipts and expenditure of the several District Road Committees in Bengal for the first quarter of the year 1890-91 be published in the Calcutta Gazette and circulated to the officers concerned.

Ordered that a copy of this Resolution, together with a copy of the abstract of receipts and expenditure, be published in the Supplement to the Calcutta Gazette.

Ordered also that a copy of this Resolution, and of the abstract referred to, be forwarded to the Commissioners of the Rajshahye, Bhagulpore, Chittagong and Chota Nagpore Divisions, to the Superintending Engineers of the Eastern and Western Circles, and to the Financial Department of this Government, for information.

By order of the Lieutenant-Governor of Bengal,

W. B. BESTIC,

Under-Secretary to the Goot. of Bengal.

## DISTRICT

# Statement of Receipts and Expenditure of the several District Road

RECE

			PROVINCIAL BATI	28.		Pui	BLIC WORKS.	IRRI- GATION.		Misc
DISTRICTS.	Balance in treasury on 1st April 1890.	Cess on lands.	Cess on mines, re	ne er nt, ad ass.	Interest on arrears of road cess.	Road tolls.	Ferry toils.	Canal tolls.	Rent of serais and staging- bungalows.	Fees, fine
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. Rs.	Rs.	Rs. A. P.	Rs. A.
Darjeeling Hazaribagh Lohardugga Manbhoom	6,615 7 0 35,315 15 10 19,818 15 10 23,432 2 0	2,575 1 4 4,892 3 10 14,524 7 1 3,153 4 3	17 12 9	2,630 2 3 4,910 0 7 14,524 7 1 3,964 14 2	15 18 9 95 15 9 21 12 6				13 8 0 7 0 0 406 6 2	2,724 4 584 0 6 0
Total	85,182 8 8	25,145 0 6	884 7 7	28,029 8 1	133 10 0				426 14 2	3,314 4
			va sa				Artist to the			
Chittagong Hill Tracts Sonthal Pergunnahs Singbhoom	0.000 4 0			0 9 6					78 8 6 1 0 0	
Total	28,885 7 2		0 9 6	0 9 6					79 8 0	
REAND TOTAL	1,14,067 15 10	25,145 0 6	885 1 1	26,030 1 7	133 10 0				506 6 2	3,814 4

EXPEN

			Repunds,		PROVIN- CIAL RATES.	AD	MINISTRATION-		STATION- ERY.			describe a	Ривыс
Districts,		Coss,	Other receipts,	Total.	Establishment and contingencies of office of collection.	Batblishment and contin- gencies of Committee's office.	Percentage cost of es- tablishment for offices of account and control,	Total.	Stationery and printing.	Original works,	Repairs.	Establish- ment.	Tools and plant, poly many plant, pla
:6		Rs.	Rs.	Rs.	Rs. A. P.	Re. A. P.	B, A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P. Bs.
Darjeeling Hazaribagh Lohardugga Manbboom	::				331 2 0 1,992 9 10 2,285 1 3 362 15 2	\$68 12 0 256 0 0 169 1 3 373 1 7	59 6 0 246 15 2 48 1 5 208 13 1	428 2 0 502 15 2 217 2 8 581 34 8	51 8 0 15 15 3 127 4 9	180 0 0	1,127 9 9 4,314 12 4 936 1 7 5,229 11 9	348 5 1 1,840 6 3 2,337 2 6 1,610 2 2	271 18 0
Total					4,971 12 3	1,166 14 10	563 3 8	1,780 2 6	194 6 0	130 0 0	11,008 3 5	6,136 0 0	808 15 3
Chittagong Tracts Sonthal Pergui	Hill noshs		-			13 11 7 249 14 0 113 6 5	 	18 11 7 249 14 0 118 6 5	36 0 10 132 10 6	 517-10 10	248 11 6 2,523 15 3 44 15 10		67 7 0 9 10 0
Total						877 0 0	,	377 0 0	168 11 4	517 10 10	2,817 10 7	3,548 2 9	77 1 0
GRAND TOTAL					4,971 12 3	1,548 24 10	563 3 8	2,107 2 6	363 1 6	647 10 10	14,425 14 0	9,684 2 9	386 0 3

FORT WILLIAM,

The 30th September 1890.

OAD FUND.

mittees for the First Quarter of the year 1890-91, ending 30th June 1890.

PTS.

SHOUS-		To the steady	A BOOK III	SUSPENSE.			Ralance	di la			
Escellane- ous.	Total.	Grant from Govern- ment,	Advance.	Deposits.	Total.	Total receipts.	of imprests in hands of Engineers and others, decreased.	Balance of uncashed cheques, increased.	Total receipts, including balance.	Outlay,	Balance in treasury on 30th June 1890.
Rs. A. P.	Rs. A. P	. Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. F.
0 4 0 1 8 0 3 7 8	2,738 0 0 592 8 0 415 13 1	1.644 9 1	1,621 14 7 1,788 0 8 85 8 0 184 1 9	26 0 0 1,100 0 0	1,621 14 7 1,738 0 8 81 8 0 1,284 1 9	5,072 6 5 9,499 2 2 16,938 15 11 5,686 9 10	 1 10 9		11,687 13 5 44,815 2 0 36,757 15 9 29,120 6 7	4,108 0 0 16,164 14 10 12,106 5 5 8,601 0 6	7,579 18 5 28,650 3 5 24,651 10 4 20,519 6 1
5 3 3	8,746 5 3	2,562 1 10	3,599 9 6	1,126 0 0	-4,725 9 0	87,197 2 4	1 10 9	erre pris Privi Prisiren	1,22,381 5 9	40,980 4 9	81,401 1 0
1,500 15 2 56 9 0 179 8 0	174 1 0	and the same	648 0 0	777 0 0 10 0 0	777 0 0 648 0 0 10 0 0	8,119 15 2 822 1 6 291 1 6	408 3 0		15,460 4 5 18,505 4 8 6,561 3 9	5,452 8 8 7,051 3 9 1,909 1 2	8,008 I 2 11,454 0 11 4,952 I 7
1,718 0 2	7,797 8 2	no.	648 0 0	787 0 0	1,435 0 0	9,233 1 8	408 3 0		38,526 11 10	14,412 8 2	24,114 8 8
1,23 8 5	11,543 13 7	2,562 1 10	4,247 9 0	1,913 0 0	6,160 9 0	46,430 4 0	409 13 9	Salter.	1,60,908 1 7	55,392 12 11	1,05,515 4 8

HURE

exs.	£8.		IRRIGA-		MISCELLANEOUS.										overn.	SUSPENSE ACCOUNT.											onsed.	ues, de-					
Works.	Total.		Canal toll establishment and contingencies.		Staging-bungalow establish- ment and confingencies.			Staging-bungalow petty construction and repairs.		Miclane	cel		T	otal		Contribution to Provincial Govern-	Advi	ince		Depo	sifs.		То	tal.	TO THE REAL PROPERTY OF THE PARTY OF THE PAR	To expen	otal idita	ure.	Balance of imprest in hands of engineers and others, increased,	Balance of uncushed cheques,		Tot	
	Rs. A.	P.	Rs.	R	8. A.	Р.	Rs.	Α.	Р.	Rs.	., P	-	Rs.	Α.	Р.	Rs.	Ra.	4. P		Rs.	. Р.		Rs.	A. 3	Р.	Rs	. А.	P.	Rs.	Rs.	. Р.	Rs.	A. P.
	1,475 14 6,426 16 3,440 6 6,839 13	7		6	37 12 31 0	0 0	2	0 0	0	31	8	0	37 94 291	12 8	0 0 0	1111	1,370 1,065 287 248	9	0 8 0 0	488 1,341 150	0 1	1	,370 ,553 ,578 398	9	0 8 1 0	3,60 10,56 7,63 8,60	1 13	7	#i	502 5,599 4,474	14 7 7 10	4,108 16,164 12,106 8,601	14 1
	18,183 2	8		1	08 12	0	293	0	0	31	8	0	423	•	0		2,921	1	8	1,979	4	4	,900	5	9	30,40	3 1	2		10,577	3 7	40,980	*
	1,505 13 4,141 14 1,812 12	9 9 8		U:3	59 2 37 5	0 7	1300			2		0	59 70	2	0 7	1 5 1	408 200	0	0 0	800			300 408 280	0	0 0 0	1,85 4,85 1,90	8 14	9		3,596 2,192	9 1 5 0	5,452 7,051 1,909	3 9
	6,960 9	94		12	16 7	7	HIE.	77	W.	2	14	0	129		7		608	0	0	380	0 (		988	0	0	8,62	3 10	1	,	5,788	4 1	14,412	8 9
	25,148 11	10		22	15 3	7	293	0	0	34	6	0	552	9	7		3,529	1	8	2,359	4	5	,888	5	9	39,02	6 11	3		16,366	1 8	55,392	12 11

C. R. KIERNANDER,
Offg. Accountant. General, Bengal.